



FACULTY OF NURSING
UNIVERSITAS AIRLANGGA
Excellence With Morality

INTERNATIONAL NURSING CONFERENCE

**The Proceeding of
The 7th International Nursing Conference**
“Global Nursing Challenges in The Free Trade Era”
Surabaya, April 8th – 9th 2016



CO-HOST:



The Proceeding of 7th International Nursing Conference:
Global Nursing Challenges in The Free Trade Era

Fakultas Keperawatan Universitas Airlangga



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Fakultas Keperawatan Universitas Airlangga

The Proceeding of 7th International Nursing Conference:
Global Nursing Challenges in The Free Trade Era

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GREETING FROM STEERING COMMITTEE

Assalamualaikum Warahmatullahi Wabarakatuh

Honorable Rector of Universitas Airlangga
Honorable Dean of Faculty of Nursing, Universitas Airlangga
Honorable Head of Co-Host Institutions
Distinguished Speakers and all Participants

Praise the presence of God Almighty, for his mercy so that Faculty of Nursing Universitas Airlangga can organized The 7th International Nursing Conference on the theme "The Global Nursing Challenges in The Free Trade Era". Welcome in Surabaya, City of Heroes Indonesia.

This international nursing conference is conducted in cooperation with 12 nursing schools throughout the nation. These institutions are the Faculty of Nursing and Midwifery Universitas Nahdlatul Ulama Surabaya, Faculty of Health Science Universitas Muhammadiyah Surabaya, STIKES Ngudia Husada Bangkalan, STIKES Pemerintah Kabupaten Jombang, STIKES Maharani Malang, Poltekkes Kementerian Kesehatan Malang, Poltekkes Kementerian Kesehatan Surabaya, Faculty of Health Science Universitas Islam Sultan Agung Semarang, Faculty of Health Science Universitas Pesantren Tinggi Darul Ulum Jombang, STIKES Insan Cendekia Husada Bojonegoro, STIKES Nurul Jadid Probolinggo, STIKES YARSI Mataram, and Faculty of Nursing Universitas Muhammadiyah Banjarmasin. Fortunately, this international nursing conference also supported by our partner institutions abroad: Flinders University* (Australia), and Japan International Cooperation Agency (JICA); and also by professional and other organisations including: AINEC* (The Association of Indonesian Nurse Education Center), Ibn-e-Seina Hospital & Research institute Multan (Pakistan) and INNA* (Indonesian National Nurses Association).

Participants of this conference are lecturers, nurses, students both from clinical and educational setting, regional and overseas area.

Finally, I would like to thanks to all speakers, participants, co-host institutions and sponsors so that this conference can be held succesfully.

Please enjoy the international conference, i hope we all have a wonderful experience at the conference.

Wassalamualaikum Warahmatullahi Wabarakatuh

Steering Committee

OPENING REMARK FROM THE DEAN OF FACULTY NURSING

Assalamualaikum Warahmatullahi Wabarakatuh

Honorable Rector of Universitas Airlangga
Distinguished speakers and all Participants

First of all I would like to praise and thank God for the blessing and giving us the grace to be here in a good health and can hold this conference together. Secondly, it is a great privilege and honor for us to welcome every one and thank you very much for your participation and support for the 7th International Nursing “**The Global Nursing Challenges in The Free Trade Era**”.

Globalization opens opportunities for nurses to compete with other nurses and work abroad. Nurses should constantly improve their competency in providing excellent nursing care. The sustainability of education related to the latest science and nursing knowledge is very important for all nurses who are working in the clinic, community, and educational nursing system, to enhance their competencies

Research and education into clinical and community practice is very important to enhance nursing competencies with nurse colleagues in the international sphere. Indonesia face problems such low frequency of nursing conference, number of researches, also international publications. This problem can hinder quality improvement of nursing services.

Along with Universitas Airlangga vision to become a world class university and enter top World University Ranking, Faculty of Nursing, participates actively in reaching the vision. To achieve World Class University ranking, faculty needs to meet the standards of World's top Universities such as Academic reputation, employer reputation, publication, faculty standard ratio, international students and exchange. International Nursing Conference is one of the few strategies that have been implemented by the faculty to increase Publication standard.

In 2016, the Faculty of Nursing Universitas Airlangga started to collaborate with 12 nursing schools throughout the nation that have the same concern to overcome the situations. These institutions including Faculty of Nursing and Midwifery Universitas Nahdlatul Ulama Surabaya, Faculty of Health Science Universitas Muhammadiyah Surabaya, STIKES Ngudia Husada Bangkalan, STIKES Pemerintah Kabupaten Jombang, STIKES Maharani Malang, Poltekkes Kementerian Kesehatan Malang, Poltekkes Kementerian Kesehatan Surabaya, Faculty of Health Science Universitas Islam Sultan Agung Semarang, Faculty of Health Science Universitas Pesantren Tinggi Darul Ulum Jombang, STIKES Insan Cendekia Husada Bojonegoro, STIKES Nurul Jadid Probolinggo, STIKES YARSI Mataram, and Faculty of Nursing Universitas Muhammadiyah Banjarmasin. Under the concern of long commitment for better health outcome of Indonesia, the Faculty of Nursing Universitas Airlangga once more aims to elaborate with the aforementioned institutions and international universities through holding an international nursing conference. The international universities include: Flinders University* (Australia), Japan International Cooperation Agency (JICA); and professional organisations including: AINEC* (The Association of Indonesian Nurse Education Center), Ibn-e-Seina Hospital & Research institute Multan (Pakistan) and INNA* (Indonesian National Nurse Association).

Finally, I would like to thanks to all speakers, participants, and sponsorships that helped the success of this event. I hope that this conference have good contribution in increasing the quality of nursing and nursing care.

Please enjoy the international conference. I hope, we all have a wonderful time at the conference.

Wassalamualaikum Warahmatullahi Wabarakatuh

Prof. Dr. Nursalam, M.Nurs (Hons)

Dean, Faculty of Nursing

Universitas Airlangga

OPENING SPEECH

UNIVERSITAS AIRLANGGA RECTOR

Assalamu'alaikum wa-rahmatullahi wa-barakatuh.

May the peace, mercy and blessings of Allah be upon you.

Alhamdulillah! Praise be to Allah, the Almighty which gives us the opportunity to gather here in “THE 7TH INTERNATIONAL NURSING CONFERENCE“. Let us also send *shalawat* and *salam* to our Prophet Muhammad SAW (Praise Be Upon Him): *Allaahumma shalli 'alaa Muhammad wa 'alaa aali Muhammad.* May Allah give mercy and blessings upon Him.

Ladies and Gentlemen,

“Everything changes and only the change itself remain unchanged,” that is some words of wisdom reminding us to the absolute truth that there is no such thing in this world can hold back the tide of change.

Nursing Education, as a professional field, inevitably has to improve along with the changes. And if it is possible, it should always be vigilant to anticipate a period of change ahead.

In this regard, we are already in ‘THE FREE TRADE AREA’. It is one of those changes and we have to deal with the problems of its implementation. Related to these problems, we expect universal Nursing Education to be able to provide attention to all aspects of public healthcare services, anywhere and in any social classes. Therefore, let us always make efforts to quality improvements, such as in the relationship between nurses and the patients, disease prevention, and patients’ treatments.

Ladies and Gentlemen,

Higher education on Nursing has its strategic roles to achieve excellent public healthcare services. Therefore, its education format must be flexible, able to adapt and anticipate any influences such as from boundless improvements of technology, economy, politics, culture and other aspects of development. At this point, joint-researches or joint-programs, seminars, scientific publications, or any other collaborations should be conducted more frequently by all nursing higher education institutions. These advance steps are necessary to achieve “Healthy Global Communities” sooner.

As a result, let us exploit these changes around us to create a condition where the quality of public healthcare service is so high that it brings happiness to all. Thus, competence’s improvement of all nursing students is indispensable. This improvement, of course, should be synchronized with the changes in all aspects. Let us optimally develop this nursing science by maintaining connections and cooperation with other institutions and finding opportunities for future collaborations with others.

Ladies and Gentlemen,

The organization of this international nursing conference must be appreciated. Firstly, because it is the seventh time of the conference organization. Secondly, the theme of this conference, “THE GLOBAL NURSES CHALLENGES IN THE FREE TRADE ERA”, has a strong sense of urgency and very appropriate at this moment.

Therefore, I would like to express my deepest gratitude to the organizing committee, the nursing education institutions- domestic or international-, all the keynote speakers and other parties which support this splendid conference.

We extend a warm welcome to all delegates and those who have travelled from foreign parts. We hope that your attendance will be rewarded academically, that you will make new friends and that you will be fulfilled through the conference activities and the artistic delights of Surabaya.

Ladies and Gentlemen,

Merely to expect Allah gracious blessings, I hereby officially open this "SEVENTH INTERNATIONAL NURSING CONFERENCE" by saying grace: "*Bismillahirrahmanirrahim*". May the objectives of this organization fulfilled and the conference be a success. Therefore let us again say: *Alhamdulillah!* Praise be to Allah.

Wassalamu'alaikum wa-rahmatullahi wa-barakatuh.
Universitas Airlangga Rector,

Prof. Dr. Moh. Nasih, SE., MT., Ak., CMA.
NIP. 196508061992031002

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Indonesia

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Universitas Airlangga, Surabaya, Indonesia

CONFERENCE SCHEDULE

DAY 1, 8th April 2016

06.30-07.30	Registration
07.30-08.00	Indonesia Raya Anthem Hymne Airlangga Welcoming Show (Tsuroya) Unipdu Jombang
08.00-08.30	Opening Remarks - Speech from Steering Committee - Speech from Dean Faculty of Nursing, Universitas Airlangga - Speech from Rector Universitas Airlangga Opening Pray: Bpk H. M. Syakur (in Bahasa)
08.30 – 08.50	Keynote Speaker Junaidi Khotib, S.Si, M.Kes., PhD.
08.50 - 09.00	- Certificate & Souvenir Given to Keynote Speaker - Opening Poster Presentation Sessions
09.00-09.30	Coffee Break
09.30-09.45	Music performance: “Daul” Madura

Plenary Session I

09.45 – 10.05	Speaker 1 Ikuko Seki (JICA) Chief Advisor Japan International Cooperation Agency (JICA) <i>“Advanced Nursing Practice in the Global Nursing”</i>
10.05 - 10.25	Speaker 2 Harif Fadhillah, S.Kp, SH, MH.Kes Chief of INNA <i>“Indonesian Nurses Ready to Compete in The Free Trade Era”</i>
10.25 – 10.45	Speaker 3 Dr. Muhammad Hadi, SKM., M.Kep. Chief of AINEC <i>“Challenges of Nursing Education in Nursing Education in Asean Economic Community Era”</i>
10.45 – 11.05	Plenary Discussion Certificate & Souvenir Given to Speakers
11.05 – 12.00	Poster Presentation 1
12.00-12.30	Prayer and Lunch

Plenary Session II

12.30 – 12.50	Speaker 4 Kristen Graham, RN, RM, MNg, MPH&TM, MPEd&Tr, GDipMid, GDipHSc School of Nursing and Midwifery, Flinders University, Australia <i>“Promoting Inter professional Collaboration to Improve Population Health Outcomes; Working with and Learning from Each Other”</i>
12.50 – 13.30	Speaker 5 Dr. Nur Mukarromah.,S.KM.,M.Kes. Dean of FIK Universitas Muhammadiyah Surabaya, Indonesia <i>“Social Capital Approach: Prevention Of Dengue Hemorrhagic Fever With Improvement Of Community Sustainability Awareness”</i>

13.30 – 13.50	Speaker 6 Dr. M. Hasinuddin, S.Kep., Ns., M.Kep. Director of STIKES Ngudia Husada Madura, Indonesia <i>“Enhancing Nurse’s Competency in Child Care Based on Evidence”</i>
13.50 – 14.10	Plenary Discussion Certificate & Souvenir Given to Speakers
14.10 – 14.40	Coffee Break and Prayer

Plenary Session III

14.40 - 15.00	Speaker 7 Dr. Tri Johan Agus Y., S.Kp., M.Kep. POLTEKKES KEMENKES Malang, Indonesia <i>“Nursing Care Management is A Success Key in Health Services”</i>
15.00 – 15.20	Speaker 8 Dr. Hanik Endang N, S.Kep., Ns., M.Kep. Faculty of Nursing, Universitas Airlangga Indonesia <i>“The Dimensions of Breast Cancer with Positive Perception Through Psychospiritual ‘Sehat’ (Syukur Selalu Hati dan Tubuh)”</i>
15.20 - 15.40	Plenary Discussion Certificate & Souvenir Given to Speakers

DAY 2, 9th April 2016

07.00–08.00	Registration
08.00-08.15	Opening Show Traditional Dance : Bedoyo

Plenary Session IV

08.15 – 08.35	Speaker 9 Madiha Mukhtar Head of Nursing Services in 500 bedded Pvt Health care sector, Ibn-e-Seina Hospital & Research institute Multan, Pakistan <i>“Perception of Indonesian Nursing Students Regarding Caring Behavior and Teaching Characteristics of Their Clinical Nursing Instructors”</i>
08.35 - 08.55	Speaker 10 Dr. Makhfudli, S.Kep., Ns., M.Ked.Trop. Faculty of Nursing, Universitas Airlangga Indonesia <i>“Self-Efficacy Enhancement Development Model Against Biological Response on Patients with Pulmonary Tuberculosis in Public Health Center of Surabaya City Region”</i>
08.55 – 09.15	Speaker 11 Ima Nadatien, SKM.,M.Kes Nahdlatul Ulama University of Surabaya, Indonesia <i>“Pride As The Attitude To Optimize The Nurse Performance”</i>
09.15– 09.35	Plenary Discussion Certificate & Souvenir Given to Speakers
09.35-09.45	Traditional Dance Performance: Limade
09.45 – 10.15	Coffee Break

Oral Presentation 1

10.15 – 12.15	Room 1 (Garuda Mukti)
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	Medical Surgical and Critical Care Nursing Management and health policy Geriatric Nursing
	Room 2 (Kahuripan 301) Medical Surgical and Critical Care Nursing Management and Health Policy Geriatric Nursing
	Room 3 (Kahuripan 302) Women Health and Pediatric Nursing
	Room 4 (Ruang Sidang A) Women Health And Pediatric Nursing
	Room 5 (Ruang Sidang B) Community Health and Primary Care Nursing Geriatric Nursing
12.15 – 13.15	Prayer and Lunch
	Poster Presentation 2

Oral Presentation 2

13.15 - 15.15	Room 1 (Garuda Mukti) Medical Surgical and Critical Care Nursing Community Health and Primary Care Nursing Geriatric Nursing
	Room 2 (Kahuripan 301) Medical Surgical and Critical Care Nursing Community Health and Primary Care Nursing Geriatric Nursing
	Room 3 (Kahuripan 302) Woment Health And Pediatric Nursing Mental Health Nursing
	Room 4 (Ruang Sidang A) Woment Health And Pediatric Nursing Mental Health Nursing Geriatric Nursing
	Room 5 (Ruang Sidang A) Educational and Interprofesional Collaboration Geriatric Nursing
15.15– 15.30	Coffee Break
15.30 – 15.45	Closing Remark Certificate Given for Co. Host & Participant

ADVANCED NURSING PRACTICE IN THE GLOBAL NURSING

SEKI Ikuko*)

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ABSTRACT

Global Nursing is rather a new concept in nursing, and is becoming a new area of nursing science. The term became popular in the nursing community as the globalization started to gain its momentum around 1990. Nursing science itself has progressed through the process of differentiation and specialization, resulting in number of disciplines; though, the global nursing as a new area of nursing science does not seem to become one of such disciplines. On the contrary, transdisciplinary-nature of the concept of the global nursing has been believed to be essential to the concept ever since the notion started to draw our attention.

The notion of global nursing has no precise definition yet; it is, however, believed that the notion reflects the following:

- a) Nursing targeting various groups based on the international health;
- b) Nursing where the individual backgrounds of the patients from various cultures are respected, irrespective of the cultures the care providers are from.

Having lived and worked in three African countries, Malawi, Kenya, and Burundi, as well as in Indonesia, I have faced "global nursing" situations, and thus would like to give this burgeoning new research area some personal consideration.

CHALLENGES OF NURSING EDUCATION IN THE ASEAN ECONOMIC COMMUNITY ERA

Muhammad Hadi *)

Chief of AINEC

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BACKGROUND

Nurse is one of the biggest part of the health workers which continually evolving to meet the needs of public health services. Such changes must be addressed properly by nursing education world, it needs variation methods of approach in both teaching in class, laboratories and clinics so competence of learners can be achieved. In addition to that, in achieving competence of learners, another important step is to bring the education and practice closer, which is now has a big gap. The gap between nursing education with health services in Indonesia are also affected by many conditions, one of which is the socio-economic problems which resulted in the provision of educational facilities, health care and improvement of human resources. The World Bank report says that a third of the population in Indonesia before 2005 are below the poverty line and about 2% of Gross National Product (GNP) is used for health care. In 2008 the Indonesian economy improved, followed by improving the quality of education and the growth of the hospital.

The growth of the hospital began to improve in 2012, Indonesian Hospital Association noted the number of hospitals throughout Indonesia is as much as 1.979. Based on Law No. 44 of 2009, each hospital should be accredited, it is meant for maintaining the good quality in a hospital and provide assurance to the public that they provide a high quality care. The rapid growth of the hospital is also followed by the growth of nursing education institutions at a fast rate. At the end of 2010, the number of institutions nursing diploma level reached 389 institutions, 310 undergraduate institutions, the level of the profession as much as 52 institutions, the level of master's / specialist as much as 3 institutions and doctoral levels as much as one institution. The final report of 2011, the Health Project Education Quality of Higher Education said that the number of nursing education S2 level grew 12 institutions and professional education institutions grew 112. The addition quantitatively above nursing education has not been matched by an adequate arrangement of vehicle practices. Practice places in question are hospitals, clinics, health centers, nursing homes and community. Besides, it has not been matched by an increase in the quality and quantity of lecturers at least equal masters or specialist.

In the effort to improve the quality of nursing education in Indonesia, the organizers of the college formed organization that aims to maintain the quality of education independently, named the Association Institutions Nursing Education Centre (AINEC). AINEC was established in 29 June 2001, declared in Bandung and is the only organization stood above nursing education in Indonesia. AINEC also has been Recognized by the Ministry of Justice and Human Rights and the Ministry of National Education of Indonesia. AINEC vision is to become a solid organization to contribute to the development of science and technology through the application of higher education nursing quality nursing according to community needs. The missions of AINEC are; a) to improve and strengthen nursing education standards both nationally and internationally. b) to improve and develop scholarships, human resources and research activities. c) to strengthen and expand partnerships with various universities in various parts of the world. d) to improve the quality of nursing education in Indonesia. AINEC currently has 300 active members out of the total

number of the whole college of nursing in Indonesia and is divided into 13 regional are: Region 1 (Banda Aceh), Regional 2 (North Sumatra), Regional 3 (West Sumatra, Riau, Riau Islands, Jambi) , Regional 4 (southern Sumatra, Bangka Belitung, Lampung and Bengkulu), Regional 5 (Jakarta, Banten), Regional 6 (West Java), Regional 7 (Yogyakarta), Regional 8 (Central Java), Regional 9 (East Java), regional 10 (Bali, West Nusa Tenggara, East Nusa Tenggara), region 11 (in South Kalimantan, central Kalimantan, West Kalimantan, East Kalimantan and North Kalimantan), regional 12 (South Sulawesi, central Sulawesi, southeast Sulawesi, West Sulawesi, Gorontalo and North Sulawesi), Regional 13 (Maluku, North Maluku, Papua and West Papua). AINEC activities, including; The annual meeting of members, a general meeting of members of 4 years, the research grant competition, gave a briefing to all members regarding the implementation of the curriculum, accreditation, training, workshops, seminars, activities of other academic, international conference, expanding international cooperation and collaboration with various institutions to strengthen nursing in Indonesia.

ASEAN ECONOMIC COMMUNITY

Currently, Indonesia has implemented an agreement on the ASEAN Economic Community, which will apply single market and production base. It describes the conditions; a) capital flows which will be free to come and go, b) The free flow of goods, c) the free flow of services, d) the free flow of investment, e) the problem of food safety, f) the free flow of skilled labor, and, g) the integration of 12 priority sectors. In such situations the essential point is a challenge and an opportunity for nurses in the region southeast Asia, both the current and the time to come is an open competition which will take place increasingly fierce and tight. Therefore only qualified nurses who will be able to win the competition in the world of work. That our priority is the quality and accessibility

In this ASEAN economic community era, there are three main things that have been agreed upon among others: a) Politics and Security, b) Economics, and c) social culture. We see this agreement as an opportunity as well as a challenge, especially for the nursing profession, which are important in different parts of the world. As an opportunity, it will provide expanding markets for products and services at the same time will open up employment opportunities for skilled nursing profession Indonesia. As the challenge is the influx of products and services from outside Indonesia, the influx of skilled foreign nurses professionals who are ready to compete with local nurses, even at a time will make the best Indonesian nurses will leave Indonesia to other countries that provide better welfare for himself.

Movement of labor under the agreement by all member countries of ASEAN to recognize or accept some or all of the results of the assessment or certificate. MRA is also an attempt to harmonize standards and conformance standards. We need to know that MRA in nursing we have agreed upon in the year 2006. Other areas that have also been agreed upon is the field of engineering, surveying, architecture, dentistry, medicine, accountancy & tourism.

WHO IS A NURSE?

Who exactly is nurse? Based on the definitions in the legislation 38/2014 about nursing explained that the nurse is someone who has graduated high nursing education both in Indonesia or abroad and recognized by the government in accordance with the provisions of the legislation in force. “Nurse refers to a natural person who has completed the **required professional training and conferred the professional nursing qualification**; and **has been assessed by the Nursing Regulatory Authority** of the Country of Origin as being technically, ethically and legally qualified to undertake professional nursing practice; and is registered and/or licensed as a professional nurse by the Nursing Regulatory Authority of the Country of Origin. This definition shall not apply to a

technical level nurse. In this regard, the purpose of the MRA is; a) facilitating professional mobility of nurses in the countries of ASEAN, b). exchange of information and experts on standards and qualifications, c). promotes the adoption of best practice professional nursing services, d) provide opportunities for capacity building and training for nurses.

Some of the challenges facing nurses in the 21st century, especially in Indonesia and the other nurses are; 1) related to the competence and ability in a foreign language, especially English, Arabic, china and several other international languages. 2) Qualifications level agreed in the MRA and 3) The regulatory issues that still need to be strengthened. Nursing regulation in Indonesia has been regulated through various laws; such as law no. 12/2012 on higher education and the minister of health regulations governing the profession, law No.38 / 2014 about nursing and law no.36 of health personnel. Given the regulation, Indonesian nurses prepare the various standards required for improving the quality and global competitiveness. Therefore, the required professional education in the higher education system with standardized practice experience. Another characteristic of nursing as a profession is the ability to provide professional services and coordinate with other health team, making decisions based on critical thinking, communicating and collaborating with clients, family. It also must be able to perform advocacy functions and has the leadership skills to create change, to develop a variety of skills are needed, as well as interaction based on an attitude of "caring". One of the most distinguishing characteristics of nursing, namely the nature nurturing, generative and protective of providing services.

In order to deal with globalization, the Indonesian government has also made efforts to standardize the qualifications of human Indonesia through Presidential Regulation no. 8 in 2012 on Indonesian Qualification Framework. This became the standard IQF recognition for graduates of formal and informal education. This condition is expected to improve the competitiveness of nursing personnel and other professionals to face the 21st century, which is full of competitions. Through this IQF human resources quality improvement could be achieved through; education, training, work experience in the professional world or learn on their own. With IQF, quality and competence of nursing personnel from various channels will get the same recognition.

Indonesia has had an IQF that contains four domains; morals and ethics, work competences of knowledge and skills, responsibility and accountability; the level of independence. IQF also harmonized and referenced with ASEAN Qualification Frame Work (AQRW) where in AQRW containing domain; 1) knowledge comprehensions and skills, 2) Application and responsibility, the roomates Contexts in knowledge and skills are demonstrated. It is expected there is harmonization and alignment in the recognition of qualifications of nurses at the ASEAN level. The nurses like you all have to prepare ourselves in the era of quality competition.

In the field of nursing, especially Indonesia still has a diploma qualifications and has grown rapidly in the BSN level since 1995. However, there remains disparity between the two. This disparity caused by social conditions, culture and geography of Indonesia which has a diverse ethnicity and island, so that the quality of college graduates will be different. Types of nursing education in addition to diploma 3 and BSN also have a profession level educational programs, master's, specialist, doctoral and specialist sub. The efforts made by the government in collaboration with professional organizations INNA (Indonesian National Nursing Association) and Association Institution Nursing Education Centre perform Quality Assurance. Quality Assurance activities conducted through two things, namely; improving the quality of the institution through accreditation systems and the individual quality of graduates through national competency test. With QA is applied then all education providers to be noncompliant with these efforts and will produce graduates standardized.

Some of the steps that need to be done to build the nursing human resources that have high competitiveness among them is; a) to develop competency-based human resources through

education and career development, a) standardization competence of graduates through the formulation of learning outcomes based on IQF, c) work to improve the productivity and quality of nurses that has national and global competitiveness. Quality of nursing service greatly affect the quality of health care, and even become a determining factor for the image of health care institutions (hospitals) in the public eye. This happens because nursing is a professional group with the greatest number, at the front and closest to the suffering of others, pain, misery experienced by the community. One indicator of the quality of nursing care is patient satisfaction. Implementation of the application of the collaboration is expected to make changes in the field of nursing education to meet the challenges of nursing resource needs where necessary to improve the quality of nursing services. In an effort to increase the competence of learners through the improvement of the educational models is also an important effort and a major breakthrough. Implementation of collaboration between hospitals and educational institutions can also cause tension if roles are not understood and implemented as a common need. Structuring models of practice and learning model for nursing also strived to encourage their evidence-based practice, providing practical experience to organize the order of nursing services is higher and complex and encourages all parties to lifelong learning for their encouragement changes along the changing needs of patients and communities will be nursing services quality.

KEY SUCCES FACTOR IN NURSING

There are three keys to success in the globalization era of the 21st century as the first one is to be a competent nurse. Both have to master the technology and able to communicate through oral and written. The third is the need to always think critically, conduct ongoing research to improve evidence-based practice measures resulting in a continuous renewal in the field of clinical practice and science of nursing.

Competency test is a screening process to ensure that registered nurses have the required competence. The aim of competency test is Enforce accountability role of professional nurses in the profession, standards and ethics. Enforcing proession in practice, Cross check the competence of graduates of an educational institution and protect public confidence in the nursing profession. There are two competency tests model, the model exit exam and work place assessment. Exit exam performed on a nurse who will graduate / graduate who first competency test. Certificates of competence obtained valid for 5 years. Work place assessment done on the nurses who have worked and given a certificate of competency which valid for five years.

In the era of progress in the field of nursing nowadays mastery of technology is essential to a nurse. Nurses can not be separated from technology both as a means to provide services and communication media. The use of computers, android, mobile and advanced tools in health is absolute. Everyone can not get away from cell phones and other technology tools. Keep in mind that technology is always changing rapidly. Therefore, as a nurse should continuously learn to master the technology.

Critical thinking, consists of a mental process of analyzing or evaluating information, particularly statements or propositions that have been offered as true. It involves reflecting upon the meaning of statements, examining the offered evidence and reasoning, and forming judgment about facts. Whatever definition of critical thinking is used, most agree that is more complex than problem solving or decision making, involves higher order reasoning and evaluation, and has both a cognitive and affective component. The authors believe that insight, intuition, empathy, and willingness to take action are additional components of critical thinking. Importance of nursing research; because nursing is a profession, nurses should contribute to the generation of nursing knowledge, research is major means by which nurses could generate knowledge, research is essential for the development of empirical knowledge that enables nurses to provide evidence-

based nursing care. Broadly, the nursing profession is accountable to society for providing high quality, cost-effective care for patients and families.

SOCIAL CAPITAL APPROACH: PREVENTION OF DENGUE HEMORRHAGIC FEVER WITH IMPROVEMENT OF COMMUNITY SUSTAINABILITY AWARENESS

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INTRODUCTION

Eradicating the incident of DHF in Indonesia has not been successful yet in the all of areas. It is because of the government policy regarding DHF eradication tend to focus on cases as well as curative. Necessarily, DHF eradication should be done earlier and continuously (Bramono, 2005). In hence, the application of social capital approach in enhance the community sustainability awareness is important to prevent the escalating of DHF's incident. Social capital approach is social organizations that accommodate coordination and cooperation for mutually beneficial (Putnam, 1995). There are several indicators of social capital including values, sense of identity, norm, trust systems, cooperation, participation, fear, attitude, perception, opini, satisfaction, expectation (Spellerber, 1997; Suharto, 2005). Therefore, the purpose of this study was to analyses the influence of social capital on community sustainability awareness in the prevention of DHF.

METHODS

The analytic observational cross sectional design was used. The first step in this study was identified and analyzed social capital factors in the community. The second step was comparing the social capital's indicators in the DHF endemic area and non-endemic area. The last step was analyzed the influence of social capital on community sustainability awareness in the prevention of DHF in Sidoarjo district, East java, Indonesia. There were 296 eligible samples that live in the working areas of Tanggulangin's and Buduran's Primary Health Care. Tanggulangin was endemic DHF area and Buduran was non-endemic DHF area in the Sidoarjo District. The inclusion criteria was head of households which had family members experience infected by DHF and at least 1 year stayed in that area. Multistage random sampling was performed.

Questionnaires, observation and structured interview were performed. Self-development questionnaires based on the Spellerber's (1997) and Suharto's (2005) theories were used. The validity and reliability were achieved. Mann-Whitney, Regression Logistic, and SEM were used as analysis test.

RESULTS

There were 296 eligible samples who willing to participated in this study. The majority sample was 40 – 44 years old (34.8%), senior high school education (58.1%) and employee (38.9%). In Tanggulangin sub-district, there were 148 samples who walling to participated. The majority sample was 40 – 44 year olds (30.4%), senior high school education (60.8%), and employee (64.2%). Thus, in Buduran sub-district, there were 148 samples who walling to participated. The majority sample was 40 – 44 year olds (39.2%), senior high school education (55.4%), and others (50.6%) (Table 1).

Table 1 Characteristics of sample in Tanggulangin and Buduran sub-districts, Sidoarjo in 2014

Characteristics	Sub-districts				Total	%
	Tanggulangin		Buduran			
	Frequency	%	Frequency	%		
Ages:						
25 – 29 year olds	4	2,7	2	1,3	6	2.0
30 – 34 year olds	18	12,2	17	11,5	35	11.8
35 – 39 year olds	37	25	26	17,6	63	21.3
40 – 44 year olds	45	30,4	58	39,2	103	34.8
45 – 49 year olds	32	21,6	16	10,8	48	16.2
50 – 54 year olds	4	2,7	16	10,8	20	6.8
55 – 59 year olds	6	4	8	5,4	14	4.7
65 – 69 year olds	2	1,4	5	3,4	7	2.4
Education background:						
Elementary school	4	2,7	14	9,5	18	6.1
Junior High School	28	18,9	42	28,4	70	23.6
Senior High School	90	60,8	82	55,4	172	58.1
Bachelor Degree	26	17,6	10	6,7	36	12.2
Occupation:						
Government employee	4	2,7	10	6,7	14	4.7
village officials	4	2,7	12	8,1	16	5.4
employee	95	64,2	30	20,3	115	38.9
Household	7	4,3	20	13,5	27	9.1
others	42	26	72	50,6	114	38.5

There were differences in social capital indicators between endemic (Tanggulangin sub-district) and non-endemic (Buduran sub-district) areas including sense of identity (*p-value* 0.006), trust systems (*p-value* 0.000), participation (*p-value* 0.023), and attitude (*p-value* 0.000) (Table 2). In general, the social capital in both areas was similar. In the other hand, the sustainability awareness in both areas showed differentiation (*p-value* 0,000) (Table 2).

Table 2 The differences of DHF indicators between endemic and non-endemic areas

Indicators	Sub-districts				Total	%	p-value
	Tanggulangin		Buduran				
	Frequency	%	Frequency	%			
Value							0.055
good	37	25	27	18,2	64	21.6	
Fair	77	52	74	50	151	51.0	
Poor	34	23	47	31,8	81	27.4	
Sense of identity							0.006*
good	44	29,7	37	25	81	27.4	
Fair	84	56,8	64	43,2	148	50.0	
Poor	20	13,5	47	31,8	67	22.6	
Norm							0,337
good	42	28,4	51	34,5	93	31.4	
Fair	69	46,6	63	42,5	132	44.6	
Poor	37	25	34	23	71	24.0	
Trust systems							0,000 **
good	68	45,9	30	20,3	98	33.1	
Fair	47	31,8	70	47,3	117	39.5	
Poor	33	22,3	48	32,4	81	27.4	
Cooperation							0,750
good	40	27	39	26,4	79	26.7	
Fair	79	53,4	85	57,4	164	55.4	
Poor	29	19,6	24	16,2	53	17.9	
Participation							0,023 *
good	52	35,1	41	27,7	93	31.4	
Fair	78	52,7	72	48,7	150	50.7	
Poor	18	12,2	35	23,6	51	17.2	
Fear							0,583
good	40	27	36	24,3	76	25.7	

Fair	77	52,1	92	62,2	169	57,1	
Poor	31	20,9	20	13,5	51	17,2	
Attitude							0,000**
good	65	43,9	36	24,3	100	33,8	
Fair	63	42,6	73	49,3	136	45,9	
Poor	20	13,5	39	26,4	59	19,9	
Perception							0,165
good	41	27,7	43	29,1	84	28,4	
Fair	78	52,7	56	37,8	134	45,3	
Poor	29	19,6	49	33,1	78	26,4	
Opini							0,294
good	56	37,8	50	33,8	106	35,8	
Fair	62	41,9	60	40,5	122	41,2	
Poor	30	20,3	38	25,7	68	23,0	
Satisfaction							0,297
good	41	27,7	40	27	81	27,4	
Fair	73	49,3	88	59,5	161	54,4	
Poor	34	23	20	13,5	54	18,2	
Expectation							0,344
good	44	29,7	40	27	84	28,4	
Fair	71	48	67	45,3	138	46,6	
Poor	33	22,3	41	27,7	74	25,0	
Social capital							0,911
good	38	25,7	43	29,1	81	27,4	
Fair	80	54,1	71	48	151	51,0	
Poor	30	20,3	34	23	64	21,6	
Sustainability Awareness							0,000**
Good	58	39,2	89	60,1	147	49,7	
Poor	90	60,8	59	39,9	149	50,3	

*Significant p-value < 0.05; **Significant p-value < 0.01

Simple regression test was performed to analyze the effect of social capital indicators to sustainability awareness in those areas. Further, in Tanggulangin sub-district, value influenced the sustainability awareness (*p-value* 0,002). People who have poor level of value had probability good level of sustainability awareness (OR 6.1; 95% CI: 2.04-18.3). In Buduran sub-district, value influenced the sustainability awareness (*p-value* 0,001). People who have poor level of value had probability good level of sustainability awareness (OR 0.03; 95% CI: 0.009-0.12) comparing with people who have good level of value. Thus, People who have fair level of value had probability having good level of sustainability awareness (0.21) comparing with people who have poor level of value (Table 3).

Another indicator which influenced sustainability awareness in Tanggulangin sub-district was cooperation (*p-value* 0,000). People who have poor level of cooperation had probability 0.25 times having good sustainability awareness (OR 0.25; 95% CI: 0.8-0.78) comparing with people who have good level of cooperation. Thus, people who have fair level of cooperation had probability 1.53 times having good level of sustainability awareness comparing with people who had poor level of cooperation. In the other hand, in Buduran sub-district, cooperation was a factor which influenced sustainability awareness (*p-value* 0,012). Thus, people which have poor level of cooperation had probability 7.75 times having good level of sustainability awareness (OR 7.75; 95% CI: 2.45-24.5) comparing with people who have good level of cooperation. Further, people who have fair level of cooperation had probability 3.0 times having good level of sustainability awareness comparing with people who had poor level of cooperation (Table 3).

One of social capital indicator was satisfaction. Satisfaction was influenced the sustainability awareness in Tanggulangin Sub-district (*p-value* 0,003). People who have poor level of satisfaction had probability 0.83 times having good level of sustainability awareness comparing people who have good level of satisfaction. People who have fair level of satisfaction had probability 0.12 times having good sustainability awareness comparing with people who have poor level of

satisfaction. In the other way, in Buduran sub-district, satisfaction was one of factor which influenced sustainability awareness (p-value 0.011) (Table 3).

Table 3 Effect of Social Capital for Sustainability Awareness in Tanggulangin and Buduran Sub-Districts.

Sub-districts	Social Capital	Sustainability Awareness		Total	p-value	OR (95% CI)
		Good	Poor			
Tanggulangin	Good	8 (13,8%)	26 (28,9%)	34	0,173	2,22 (0,83-5,99)
	Fair	28 (48,3%)	43 (47,8%)	71		1,14 (0,47-2,76)
	Poor	22 (37,9%)	21 (23,3%)	43		1
	Total	58 (100%)	90 (100%)	148		
Buduran	Good	20 (22,5%)	10 (16,9%)	30	0,043*	0,79 (0,11-0,79)
	Fair	51 (51,3%)	29 (49,2%)	80		0,47 (0,19-1,19)
	Poor	18 (20,2%)	20 (33,9%)	38		1
	Total	89 (100%)	59 (100%)	148		

*Significant p-value < 0.05

In this study, there were twelve variables which expected influencing sustainability awareness involving values, sense of identity, norm, trust systems, cooperation, participation, fear, attitude, perception, opines, satisfaction, and expectation. Thus, the results showed there were eight variables which influenced sustainability awareness which were sustainability awareness (0,0001), sense of identity (0,0001), norm (0,0001), trust systems (0,0001), cooperation (0,0001), attitude (0,0001), perception (0,0001), and expectation (0,0001)) (Table 4).

Table 4 Social Capital Indicators for Sustainability Awareness in Tanggulangin and Buduran Sub-Districts.

Variabels	Log-Likelihood	G	p value
Values	161,857	36,341	0,0001**
Sense of identity	185,130	13,068	0,0001**
Norm	193,727	4,471	0,034**
Trust systems	185,367	12,831	0,0001**
Cooperation	184,586	13,612	0,0001**
Participation	197,891	0,306	0,580**
Fear	197,118	1,080	0,299**
Attitude	159,089	39,089	0,0001**
Perception	182,351	15,847	0,0001**
Opini	198,174	0,024	0,877**
Satisfaction	198,196	0,002	0,965**
Expectation	179,945	18,253	0,0001**

*Significant p-value < 0.05; **Significant p-value < 0.01

DISCUSSION

In general, the social capital in both areas was similar. The population in both areas showed the indicators of social capital which adhere/stick in societies including togetherness, solidarity, enthusiasm for cooperation, and the ability to empathize. Subsequences, disappearance of social capital indicators are threatening the unity of community, nation and country. In case, collective problems will difficult to solve. Togetherness is useful in lighten the load and sharing the thoughts, therefore reinforce the social capital. Moreover, enhance resistance, power struggle, and the quality of life of the community. The absence of the social capital, it is impacting in the susceptibility of the community from outsider interventions.

Social capital is important for the community (Lesser, 2000). Assessing information, power sharing media, developing solidarity, mobilization of community resources, achieving togetherness, and forming togetherness behavior, as well as organizing the communities are benefits which can

reach through the social capital. Social capital is a commitment from individual to share, trust, and giving responsibility to pointed people to role as their job description. Feeling of togetherness, solidarity, and responsibility are the results from the social capital.

Riddell (1997) found there were three indicators of social capital, which are trust, norm, and network. Norms are consisted of comprehension understanding in value, hope, and believe which run together by a group of people. The sources of norm are religion, moral guideline, as well as secular standard such as professional code etc. Norm was formed and developed based on the histories of cooperation and applied to support cooperation atmosphere (Putnam, 1993; Fukuyama, 1995). In sum, norm is constituted pre-condition and production from social trust as well.

The characteristics of sustainability awareness in both areas identified based on the geographies and demographist views. Based on the geographical location, the overage areas in both areas are 3,500 ha. Average rainfall is 150 mm / year or as much as 8 days a month. Based on the demographics view, the population average is about 47,299 people. However, there was difference in the number of DHF incidence in both areas. Since 2010, Buduran Sub-district has been declared as area which free from DHF from Sidoarjo's Government. Accordingly, there were several factors which influenced differences conditions related to the number of DHF incident were discovered through this study.

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STATEMENTS OF ETHICAL APPROVAL

Ethical approval received from Ethical Review Board Public Health Faculty in Universitas Airlangga. There were three steps to collect inform consent sheets. Firstly, researcher invited health volunteers in those areas, explained about research and asked a help to make a meeting schedule with eligible sample. Secondly, health volunteers invited eligible respondent in a meeting and researcher explained about research. Lastly, inform consent sheets were collected by researcher from respondent who willing to participated in this study.

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COMPETING INTEREST:

None declared.

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PROMOTING INTERPROFESSIONAL COLLABORATION TO IMPROVE POPULATION HEALTH OUTCOMES; WORKING WITH AND LEARNING FROM EACH OTHER

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ABSTRACT

There is a growing emphasis on interprofessional collaboration in both learning and practice with evidence demonstrating it can lead to improvements in health service delivery and population health outcomes. Collaboration between health disciplines harnesses the collective strength of practitioners in their many professional spheres of work and influence, including education, health service provision, research and policy development.

Promoting interprofessional collaboration ideally commences in pre-service education. When students from different disciplines learn with, from and about each other they are more likely to work together effectively as professionals when they graduate. Interprofessional pre-service education has been shown to have multiple benefits, including improvements in professional identity, communication, team and self-reflection skills and understanding of and respect for the differences between the professional roles. These benefits have been recognised in many countries with inter-professional learning and practice opportunities incorporated into pre-service curricula.

Likewise, the benefits of inter-professional collaboration within health service provision includes improved communication, team based care and health service coordination, enhanced professional satisfaction and more effective utilization of resources, all which lead to improved quality of patient care and improved population health outcomes. In addition, promoting inter-professional collaboration in research and policy development at local, national and international level enables the sharing of knowledge, expertise and different perspectives to achieve a greater depth of understanding to influence change and strengthen health systems.

This presentation will therefore explore the benefits, challenges and opportunities for interprofessional collaboration in learning and practice and its role in improving health service provision and population health outcomes and the achievement of the Sustainable Development Goals.

Key words: Inter-professional, collaboration, practice and learning, health outcomes

ENHANCING NURSE'S COMPETENCY IN CHIDCARE BASED ON EVIDENCE

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The concept of evidence-based practice is very relevant in the current societal and healthcare climate. Great 'lip-service' is continually paid to the notion of evidence-based practice and many would claim that it is already the reality (McKenna, Ashton and Keeney, 2004). However, this claim does not stand up to scrutiny when examined in the philosophy and context of what evidence-based practice is. Such an anomaly clearly has implications for nurse education and in particular the way in which research is presented and delivered to students.

A. Background

In order to deliver clinically effective health care, it is essential to engender a culture of evidence-based practice among healthcare practitioners (Fineout-Overholt, Melnyk and Schultz 2005; McInnes et al 2001). In so doing, the potential to deliver improved patient outcomes can be realised (Craig and Smyth, 2007). Many healthcare practitioners believe that their practice is evidence-based, when in fact often what is meant by this is that the healthcare policies that they adhere to are underpinned by research findings. Gournay (2001), Pearson (2003) and McKenna et al (2004) identified that there is little proof of evidence-based practices among nurses. Pravikoff, Pierce and Tanner (2005) reinforce this point in their study which demonstrated that nurses do not always possess adequate knowledge and skills necessary to find the evidence on which to base their practice. The application in practice of policies that are based on research findings alone does not necessarily guarantee that the care provided is evidence-based. Such beliefs can arise from a lack of understanding of what evidence-based practice actually is, coupled with the fact that it is often considered synonymous with research utilisation (McKenna, Cutcliffe and McKenna, 1999; Goode, 2003; Foster, 2004). This is a misnomer that needs to be addressed.

Melnyk and Fineout-Overholt (2005, p.6) define evidence-based practice as 'a problem-solving approach to clinical practice that integrates:

1. a systematic search for and critical appraisal of the most relevant evidence to answer a burning clinical question,
2. one's own clinical expertise,
3. patient preferences and values.

Evidence-based practice is a problem solving approach to clinical practice that emphasises the use of best evidence in combination with the clinician's experience as well as patient preferences and values to make the decision about care and treatment. While the utilisation of research findings plays a valuable role in the process of evidence-based practice, evidence-based practice is far greater and infinitely more patient-centred than research utilisation alone. The above definition clearly implies that the process itself places immense value on the experience and expertise of the practitioner in addition to the patients' own preferences. The main aim of evidence-based practice is to optimise outcomes for patients and clients by selecting interventions that have the greatest chance of success (Melnyk and Fineout-Overholt, 2005).

B. The Role of Education in Evidence-Based Practice

Fostering a culture of evidence-based practice in nurses will enable them to influence policy and potentially transform healthcare for future generations (Killeen and Barnfather, 2005). In order for such a culture to prevail, it is imperative that appropriate instruction is instigated as early as possible in the career of the nurse and, ideally, at pre-registration level nurse education. Teaching concepts of evidence-based practice to student nurses to enable them to recognise and deliver high quality care that is evidence based is a key outcome of all nurse education programmes (Nursing and Midwifery Council, 2004; An Bord Altranais, 2005). The Nursing and Midwifery Council, UK (2004, p.5) requires nurses upon qualification to engage in practice that is 'based on the best available evidence' to ensure safe nursing practice. Similarly, the Irish Nursing Board (*An Bord Altranais*) requires that, 'students develop domains of competence and become safe, caring, competent decision-makers, willing to accept personal and professional accountability for evidence-based nursing care.' (An Bord Altranais, 2005, p.43). It could be suggested that the integration of the principles, process and skills of evidence-based practice into the nursing curriculum has the potential to enhance research dissemination and utilisation, promote evidence based nursing care, contribute to on-going professional development and foster a culture of life-long learning.

C. Why is evidence-based practice important and why now?

1. Changing patient demographics require new approaches to care.
2. The evidence base for practice is rapidly expanding and growing in complexity for nursing and other disciplines.
3. How to search, evaluate, and apply evidence in practice is unknown by many or inconsistently used.
4. There continues to be a mismatch between what we know to be quality care and the quality of care that is delivered.
5. Quality problems occur even in the hands of dedicated, conscientious professionals.
6. The burden of harm from the underuse, misuse, and overuse of care is staggering.
7. The report by the Institute of Medicine (*Health Professions Education: A Bridge to Quality*) recommends that all health care professionals possess certain skills and competencies in order to enhance patient care quality and safety. *All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics. (Institute of Medicine, 2003)*



Figure 1 : Evidence based practice *is Knowing* that what we do is the best practice.

D. Research-Practice Gap

Steps of the process included:

1. Dissemination of knowledge.
2. Synthesis of findings.
3. Critique of studies.
4. Application of findings.
5. Development of research-based practice guidelines (i.e., Agency for Health Care Policy and Research/AHCPR practice guidelines; Conduct and Utilization of Research in Nursing/CURN practice protocols).

E. Steps in the EBP Process

1. Developing a well-built question
2. Finding evidence-based resources to answer the question
3. Evaluating the strength and applicability of the evidence
4. Applying the evidence to practice
5. Evaluating the effects

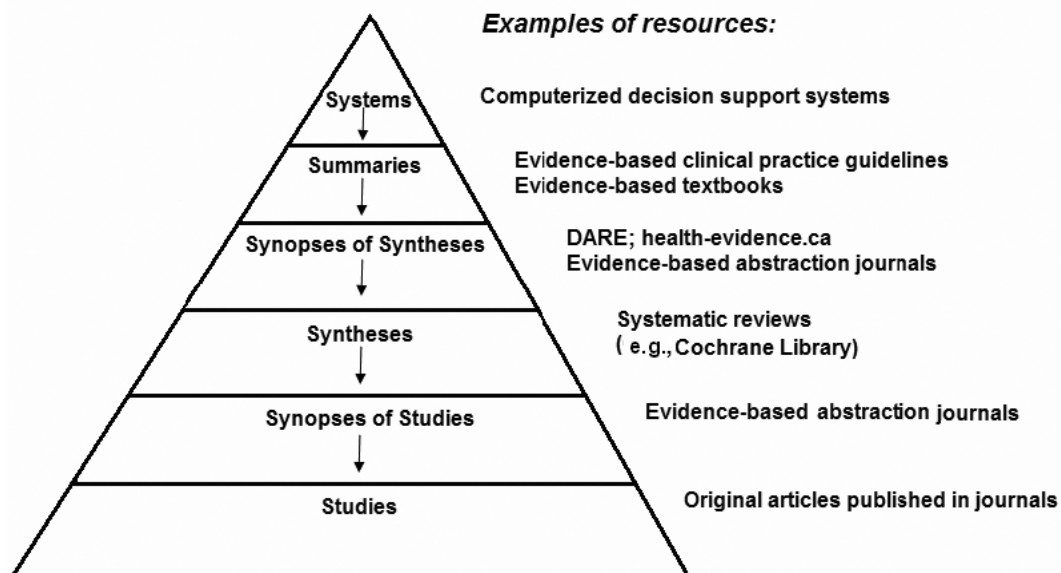


Figure 2 : Preprocessed Evidence (A. DiCenso, 2009)

F. Resources to Support Evidence-Based Practice

1. Government agencies
2. Cochrane Collaboration
3. Professional Organizations
4. Benchmark Institutions
5. Government agencies
6. Cochrane Collaboration
7. Professional Organizations
8. Benchmark Institutions

G. Pediatric Nurse Competencies

1. Contributes to knowledge development for improved child and family centered care.
2. Participates in child and family focused quality improvement, program evaluation, translation and dissemination of evidence into practice.
3. Delivers evidence-based practice for pediatric patients.

4. Ensures pediatric assent and consent, and/or parental permission when conducting clinical inquiry.
5. Promotes research that is child-centered and contributes to positive change in the health of or the health care delivered to children.

H. Educator's Role

1. EB Education for EB Practice
2. Base educational content on evidence
3. Seek the most current forms of evidence, e.g. journals & online sources vs. texts
4. Encourage students to question and challenge
5. Teach research content in a manner that is interesting and useful

I. Manager/Administrator's Role

1. Encourage inquisitive minds
2. Promote risk-taking and flexibility in the clinical environment
3. Incorporate EBP activities into performance evals
4. Provide time & resources – unit internet access
5. Provide support personnel
6. Empower staff to make EB practice changes
7. Acknowledge and reward EB improvements

J. Researcher's Role

1. Remain clinically in touch
2. Conduct clinically useful studies
3. Support clinicians in accessing and synthesizing the evidence
4. Collaborate with clinicians and patients
5. Disseminate findings that are understandable and accessible
6. Emphasize clinical implications

K. Nurse Clinician's Role

1. "Worry and Wonder"
2. Be the Inquiring Mind
3. Question clinical traditions
4. Stay abreast of the literature - guidelines
5. Find your niche – and become the expert
6. Collaborate with APNs & researchers
7. Be an advocate for evidence-based changes
8. LISTEN to your PATIENTS – to guard patient & family preferences

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NURSING CARE MANAGEMENT IS A SUCCESS KEY IN HEALTH SERVICES

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Introduction

Health services in hospitals provided by a multidisciplinary team is medical services, medical support services, medical rehabilitation and nursing services. The nursing care is one of the hospital strategic efforts in ensuring the overall quality of health services. This is due to the activities of nursing services is dominated health activities. The nursing service is the frontline services that can portray the image quality of hospitals and health services, currently provided by nurses with the level of education categories different.

Nursing services are the areas of activity, include; emergency, outpatient and inpatient. Especially for inpatient services, for 24 hours a nurse with the patient, providing services, decision-making critical decisions about the health condition of the patient. Therefore, the quality of health services is also determined by the performance of a team of health care providers, especially nursing managed through nursing management system that is able to accommodate all the needs of nursing services.

Based on the above situation, nursing management is a key determinant of success in achieving quality primary health care services. To carry out the nursing management that produces high-quality services required of a leader / manager of nursing who is able to demonstrate the performance of the function of effective leadership.

To understand deeply the importance of management and leadership of nursing in this paper will be discussed about: understanding nursing management, process of nursing management, approach to nursing management, importance of nursing management for nurses, requirements management can be applied, 5 Key Points in the Development of Nursing Management, Preparing Nurses In management, why the management skills is a priority for nurses, nursing leadership, nursing leadership success nine principles, and Conclusion.

Definition of Nursing Management

Management is the process to carry out the work through the efforts of others (Gillies). Nursing management is a form of coordination and integration of nursing resources by applying the management process to achieve the purpose and objective coverage of nursing care and nursing services (Huber, 2000).

Process management is divided into five stages: planning, organizing, kepersonaliaan, directing and controlling (Marquis and Huston, 2010).

Nursing management is the process of implementation of nursing services through the efforts of the nursing staff to provide nursing care, treatment and safety to patients, families and communities (Gillies).

Nursing Management Process

Nursing management process in accordance with an open systems approach in which each component is interconnected and interacted and influenced by the environment. Because it is a system that will consist of the five elements of input, process, output, control and feedback mechanisms. Input from the process of nursing management, among other information, personnel, equipment and facilities. Processes in nursing management is a group of managers from the highest

level of nursing managers to the nurse who has the duty and authority to do the planning, organizing, directing and monitoring the implementation of nursing services. Output is nursing care, staff development and research. The controls are used in the process of nursing management, including budget from the nursing, nurse job performance evaluation, standards and accreditation procedures. Reciprocity mechanism in the form of financial statements, audit of nursing, and appearance quality control survey of nurses (Gillies)



Importance of Nursing Management

Basically management is important because the work was heavy and difficult to do alone, so that the necessary division of labor, duties and responsibilities in the settlement. Services will be a success if the management is applied properly. Management set a goal and attempt to realize by utilizing the resources in the management process. Management regularly resulted in the achievement of goals and is a guideline of thought and action.

Management Requirements Applicable:

Management basically be applied, if applicable:

1. The common goal and common interest that will be achieved.
2. Cooperation among a group of people in formal bonds and bonds good order.
3. The division of labor, duties and responsibilities are organized.
4. The relationship of formal and orderly working ties.
5. A group of people, and the work to be done.
6. Organization to cooperate.
7. Authority (authority) and the responsibility of each individual member.
8. Coordination, integration and synchronization of each of the management process
9. Leaders / regulator and subordinates to be regulated.
10. Relationship in organization and human organization.

Why management skills are a priority for nurses ?

Newly qualified nurses and new nurse managers are often expected to solve complex problems that continually without management and leadership training. Management skills are as important as leadership skills in dealing with some difficult issues. A management framework is required to provide a consistent approach to management development for all staff in the health services, regardless of discipline, role, function or seniority.

5 Key Points in Development of Nursing Care Management

1. High-quality health services require skilled management
2. There is a correlation between high-quality management and leadership and a range of outcomes, such as higher-quality patient care and reduced patient complaints
3. Leaders rise out of the need to improve a situation. Managers take over the day-to-day functions required to sustain the improvement
4. A management framework could provide a consistent approach to management development for all health professionals
5. Management skills should be considered a priority for staff development

Preparing nurses for management

Baker et al (2012) Although management performance good or bad depends on the managers, the cause is due to lack of training. Baker also said that the new nurse managers, promoted from the role of direct care, is often not provided formal training for their new role but is expected to resolving the problem complex problem. The same thing can be said newly registered nurses and nurses newly appointed. clinical aspects normally handled but management needs are rarely identified or seen as a priority (Baker et al, 2012).

The assumption people will get these skills on the job - but they need a good role models. It can be said that, if effective learning on the job, we will have a workforce of more competent and confident. Management skills should be a priority if we want to avoid a repeat of the standard deviation of care and behaviors that lead to legal problems. Unfortunately, this is not possible unless the management skills is seen as a valuable and needed by everyone. A good start for the government to start promoting management and leadership with enthusiasm, and give them the same priority.

Leadership Nursing

Leadership is always an interesting topic discussed. Leadership problems will always be alive and dug in every age, captivate the generations that for the actual formulation of systems leadership and the right to apply to his day. This indicates that the leadership paradigm is something that is very dynamic and has a high complexity. Leadership is born as a logical consequence of human behavior and culture are born as individuals who have a social dependence and very high in meeting a variety of needs (Sanusi, 2009).

A noble expression to say that the leader is responsible for the failure of the implementation of a job. This suggests that a phrase that indicates the position of a leader in an organization at the most important position. Likewise, the leader wherever his place will always have a duty to account for his leadership.

The success or failure of an organization, will always be associated with the leader and the organization in question. In other words, leadership is a key element in determining the level of effectiveness and productivity of an organization (Sanusi, 2009).

Leadership is universal, always there and needed by humans. Leadership is needed because of a limitation of human and certain advantages in humans. On the one hand humans have limited capacity to lead, on the other hand there are people who have excess capacity to lead. From here the emergence of the need for leaders and leadership (Miftah, 1996).

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The Nine Principles Of Nursing Leadership Success

In the exceptional quality of the motivation that drives someone to aspire to lead in nursing. Nine principles that will help harness the motivation and improve the effectiveness as a leader. The nine principles are:

Principle #1: Committed to excellence

As a leader should commit itself to achieving the goal, and have the kind of commitment that turned into perseverance. Many nursing leaders committed as patient advocates, clinical nurse, or defenders of the employees but the real test comes when our commitment is hard to get out of bed and go to work with a smile, but we did because we were there to achieve the goal.

Principle #2: Measure the important things

Service. Patient satisfaction parallels staff satisfaction, so measuring employee satisfaction benefits the unit, department, and team. Develop realistic action plans to build employee satisfaction, involve all staff levels, and reassess every year. Become familiar and well versed with your patient satisfaction measurement tool. Share and explain data to your employees often.

Quality. Become familiar with and incorporate core measures into daily practice and communication. Make them breathe in your department. Convey to your team, staff, and other employees that patient safety and maintaining quality standards are a way of life. Develop unit- and department-specific performance improvement processes that the staff can articulate and implement in daily practices.

People. Be the resident role model; who you are is whom you will attract. Take notice of the employees who require a lot of cheerleading and motivating to do their jobs. They have a tendency to become negative when they don't receive feedback on a consistent basis and can infect the entire staff.

Growth. Develop unit-based and departmental volume projections and business plans. If you have a unit where you are not meeting your department average daily census or productivity, look for and measure potential growth opportunities. For example, if your unit is a 30-bed monitored surgical unit, develop a plan to add another service line similar to your existing clinical services. You may want to think about combining cardiac transplantation services with nephrology services and open beds for patients who receive kidney transplants.

Finance. Too often clinicians focus on improving people, quality, and service and leave finance far behind. However, your follow-through of your business plan for your unit or department will likely realize a financial savings, which can be reinvested into your clinical services. Build your unit-based financial plan for the year, based on your annual budget that includes salary, expenses, supplies, and capital requests.

Use your biweekly and monthly financial reports to keep on target. When you are off target, develop a variance report with a specific and detailed action plan to get back on line for the next month. Share the report with your staff in monthly staff meetings, post it on a bulletin board for staff to see, and develop a staff financial newsletter to help staff understand how they play an important part in financial management on a unit level.

If you have a problem with meeting the standard for admissions, transfers, and discharges on your unit or in your department, create a bulletin board and display the number of delayed admissions, transfers, and discharges and how much it costs the organization to hold patients in the emergency department, intensive care unit, and other areas.

Principle #3: Build a culture around service

Teach your staff to appreciate patients and families as their customers. Encourage them to use scripts and prompts when answering the telephones and consistently greet patients when

entering and leaving their rooms. You may or may not have a new state-of-the-art facility and the latest technology, but if employees treat patients and their families with personalized care and compassion, they will always come back. Expect your employees to behave as if they worked in a five-star resort. Role model how to be a servant-leader. As the leader it is imperative to be humble, open, and available to learn every day. Remember, if you lead, they will follow.

Principle #4: Create and develop leaders

An old adage is, “If your unit or department can run without you, you have done your job.” This is true, so develop your succession plan early. You can’t do it all alone. Identify your informal and formal leaders and invest in them. Take them to meetings with you; have them provide presentations to the staff and senior-level leaders. Find opportunities to highlight their strengths and minimize their weaknesses. Train them to be the next leaders.

Principle #5: Focus on employee satisfaction

Make your work environment a great place to work. Celebrate what each individual employee can bring to the team. Make rounds daily to connect with your employees on the unit or in your department. Focus on establishing a relationship with each staff member by knowing their names and their children’s names. Send staff thank you cards and birthday cards, and recognize key events in their lives. Communicate with your employees frequently on all levels: An informed employee is a satisfied employee. Have daily team meetings or huddles to review pertinent information, new changes, celebrations, or other factors.

Principle #6: Build individual accountability

It’s imperative to hold all employees accountable for the part they play in the overall goal. Develop a scorecard for each employee and meet with them every 3 months to measure their progress, accomplishments, and opportunities for growth. The SWOT approach—strengths, weaknesses, opportunities, and threats—tends to work well. Provide employees with a copy of the SWOT document you complete when conducting their 3-month 1:1 meeting; be sure to write specific goals and dates for when they must be accomplished. This is an easy way to keep accurate records on each employee’s performance, which can be used when completing their annual performance evaluation.

Principle #7: Align behaviors with goals and values

Set behavioral standards for all employees that are aligned with the organization’s values, mission, and standards. Celebrate the initiative of using the standards and have everyone sign a commitment. As a leader, role model the standards and use them in everyday conversation with your staff. Refer to standards when you’re developing or counseling staff.

Principle #8: Communicate on all levels

To serve our patient population as an interdisciplinary team, we need to communicate as an interdisciplinary team. Incorporate support services, physician staff, and senior leadership into daily rounding on all units. Each week, have a member of a different department or service round with you and your staff on the unit or in your department; this will assist in fostering trust and opening the lines of communication. Invite senior leaders to your staff meetings so your staff can see the collaborative relationship that exists among senior leaders and frontline leaders.

Principle #9: Recognize and reward success

Too often we save recognition until Nurses Week, which may be too late to retain staff. Ongoing rewards and recognition go a long way to motivating staff and enhancing innovation and creativity. Offering words of praise and encouragement and taking the time to meet with your staff 1:1 say you are interested in them. Set goals and objectives for your staff and as they meet them reward them with a paid day off for relaxation, an all-expense-paid conference, a thank you note, or a small token of appreciation.

As a nurse leader you will face many trials while you are in the peak of success. But if you think clearly, persistently, and remain committed and focused to build a team that will assist in meeting the goals and objectives in serving the community, if the nine principle above is run well, you will succeed.

CONCLUSION

The nursing care is one way health services are located in the hospital almost a full 24 hours performed by nurses in assisting patients, nurses provide services, adopt important decisions about the patient's medical condition. Therefore, the quality of health services is also determined by the performance of a team of health care providers, especially nursing managed through nursing management system that is able to accommodate all the needs of nursing services.

Management is the process of working with and through others to achieve organizational goals in a changing environment. Management is also a process of collecting and organizing the resources in achieving goals through others who reflect the dynamism of the organization. Direction and goals to be achieved are set based on the mission, philosophy and objectives of the organization. Process management includes activities to achieve goals through organizational planning, directing and controlling human resources, physical and technological.

Leadership is universal, always there and needed by humans. Leadership is needed because of a limitation of human and certain advantages in humans. On the one hand humans have limited capacity to lead, on the other hand there are people who have excess capacity to lead. From here the emergence of the need for leaders and leadership.

Leadership and management are often lumped understanding by many people. Actually, there is an important distinction to note. Management is a process of achieving organizational goals through the efforts of others. The manager is the person who always thought of activities to achieve an organizational goal. Management is thinking specifically of leadership. A key difference between the two lies in organizational terms. Leadership can happen anytime and anywhere as long as there is someone trying to influence the behavior of another person or group.

Management and leadership of nursing an inter-related whole. and it is vital to set all life that exists in this world including the activities of nursing services. With good management and effective leadership, the coaching will be harmonious and harmonious cooperation, mutual respect so that objectives will be achieved. Once the importance of management and leadership roles in life requires that we learn, appreciate, and apply especially in the field of nursing that nursing care provided to give satisfaction to the patient.

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THE DIMENSIONS OF BREAST CANCER WITH POSITIVE PERCEPTION THROUGH PSYCHOSPIRITUAL 'SEHAT' (SYUKUR SELALU HATI DAN TUBUH)

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Background

Breast cancer positioned as the disease most feared by women, and is the greatest cause of death, women aged 18 to 54 years. In addition, women aged 45 years have a risk of breast cancer 25% higher than the older (Lee, 2008). As a result, women with breast cancer seem experienced the discomfort of life and suffering. Suffering itself was described as a state of loss which affects the physical, emotional, social and spiritual (O, Brien, 1999, in Mauk Smidt, 2004).

Cancer is one of the diseases that cause of mortality. Currently breast cancer has a rating of 5-10% of all types of cancer. The incidence of breast cancer reported increases 2 times higher during thirty years world widely. WHO (Word Health Organization) estimates that the incidence of this disease in 2009 were 11 million affected and by 2030 will grow to approximately 27 million people live with cancer from 7 million to 17 million. As a result there will be 75 million people living with cancer in 2030. In the coming year of medical problems, especially in developing countries where breast cancer, with an increased incidence of up to 70% and by 2002 globally recorded 10.9 million cases. This is equal with mortality rate of 6.7 million people (John, 2008). Ibrahim (2008) stated that in Indonesia breast cancer is a type of cancer that positioned after cervix cancer. Studies show that almost of 26 cases of breast cancer recorded per 100,000 populations each year. Data in dr. Soetomo General Hospital (DSGH), the number of new patients with breast cancer showed an increasing trend. Starting form 2010 to 2012, the medical records report the snowballing trend on breast cancer by 385 people, 526 and 544 patients respectively. Accordingly, in 2013 the incidence of breast cancer decrease to 320 patients and in January 2014 until November 2014 declined slightly to 296 patients. Although in 2013 and 2014 the number women with breast cancer decreased, but during that year there are an increasing number of new patients diagnosed with breast cancer (Oncology Outpatients Service DSGH, 2014). The number of visits in to Oncology outpatient service (POSA) in DSGH showed that breast cancer was the highest cases of cancer next to cervical. This data is similar to the explanation of researchers from the University of Gadjah Mada Yogyakarta, dr. Samuel Johny Haryoni that breast cancer in Indonesia has predicted to increase by the year. Furthermore, breast cancer has been estimated to be the highest type of cancer in Indonesia.

DISTRESS BREAST CANCER PATIENTS

Suffering in breast cancer patients is described as a state of loss which affects the physical, emotional, social and spiritual (O, Brien, 1999, in Mauk Smidt, 2004). Suffering possibly changes their daily habits, relationships with others, eliminating expectations, cause of conflict and sorrow. A person who was diagnosed with cancer, there will be several stages of emotional reactions; one that often occurs is distress. Distress particularly in patients with breast cancer occurs due to the emergence of a sense of loss, for example, breast cancer patients felt that she would lose her figure. Distress may be also caused by a sense of separation from the world, such as the inability to work, economic difficulties, no longer able to perform his favorite activity. Accordingly, perceived suffering of breast cancer patients seems carrying out people into the spiritual domain and invites

the big questions in life as a process of finding meaning in life. Questions that are frequently expressed are; why I have to suffer like this? How could my family solve this problem? Why my life would change quickly, why is this happening to me? (Wright, 2005).

The suffering experienced by individuals who suffer from breast cancer has three components; loss of autonomy, loss of self-esteem, and loss of hope that shows that is not the meaning of life for individuals with cancer (Morita, Tsunoda 1999). Besides, there are other things that can lead to distress in cancer patients include medications, therapy complications and others. Handling of distress in patients with breast cancer are not always the same, we need a correct understanding and proper diagnosis so that the selection of adequate treatment improve the quality of life.

SPIRITUAL CARE OF BREAST CANCER PATIENTS, IS IT A PRIORITY?

Complexity of the problems experienced by individuals with cancer led to the emergence of spiritual needs. Spiritual needs described as an essential part of all human life (Taylor, 2005). Spirituality is known and experienced in a relationship (Burkhardt & Jacobson, 2000 in Mauk & Schmidt, 2004). The relationship is described as the horizontal dimension of spirituality which is in line with the vertical relationship with Allah (Maauk & Schmidt, 2004). Someone who face serious illness and is considered a terminal illness such as breast cancer would show a high awareness of the trust shown in everyday behavior (Johnson, 2005). Gathering the needs of breast cancer patients not only focuses on physical health but also psychological health, social and spiritual. Spiritual needs may reduce the suffering and positive effect on the recovery of physical and mental health clients. Therapeutic communication skills, sensitivity, empathy and understanding of the value of the client values are the main skill needed by nurses in psycho-spiritual treatment of patients with breast cancer (Kozier, Erb, Berman, 2004).

Distress experienced by breast cancer patients required an intervention in delivering the sense of meaning and the life's purpose by always grateful and improve the relationship with Allah, the environment and the people around. Randi (1984 in Hamid 2008) revealed that the main spiritual needs of women with cancer is to find the meaning of life, died of natural causes and needs to be accompanied at the time of death. Spiritual nursing care used to improve the adaptability and quality of life of breast cancer patients. Psycho-spiritual care approach offered a way to improve the relationship with the Creator, emotional control, as a result breast cancer patients able to face the pain with gratitude.

THE DIMENSION OF POSITIVE PERCEPTION IN PATIENTS WITH BREAST CANCER SEHAT CARE PSYCHO-SPIRITUAL "SEHAT" SYUKUR SELALU HATI DAN TUBUH

SEHAT Syukur Selalu Hati dan Tubuh is a spiritual healing attitude focuses on the researchers modified therapeutic communication, draw closer to Allah and to control emotions as it expected by patients with breast cancer. This approach is enabling them to adapt to the pain they experienced. This cause's psycho-spiritual care 'SEHAT' Syukur Selalu Hati dan Tubuh has not been studied and carried out elsewhere. Psycho-spiritual care provision in patients with breast cancer-related beliefs relationship with Allah the Almighty and the Creator may increase coping patients with breast cancer. As a result, they able to reduce the intensity of stress themselves. SEHAT psycho-spiritual healing attitude minimizes the intensity of distress resulting by applying coping mechanism and conditions of the quality of life of breast cancer patients. SEHAT is a series of worship by always grateful for the favors of Allah with the purpose of breast cancer patients would be able to improve their spiritual intelligence. Additionally SEHAT is a spiritual healing intervention that is modified by the researchers intended to people with chronic diseases; especially breast cancer can have emotional intelligence. As a result, the intention of the patient is able to

make sense of his condition, and unaware of anything that happens in life is the grace of Allah the Almighty. SEHAT focuses on the rituals of Duha prayer, reading the Qur'an, dhikr and spiritual motivation to write the favor of Allah SWT is expected to change coping strategies, changing perceptions of distress into eustress stress that affects the body's response. The condition is in line with the psychological concept, which states that the cognitive changes can reduce the intensity of stress (Quinn, 2001).

SEHAT psycho-spiritual care provision (Syukur Selalu Hati dan Tubuh) refers to the development of psychoneuroimmunology (PNI), which focuses on the perception of stress and the stress response. Psychological distress experienced by patients with breast cancer affects the quality of life and the way they manage stress through coping mechanisms. Additionally, SEHAT as a psycho-spiritual healing will be perceived in the limbic system, precisely in the hypothalamus. These signals will propagate to neuralgia and neurons in the hypothalamus. Psycho-spiritual signals are perceived in the limbic system propagate to hypothalamic neurons lead to CRH (corticotrophin releasing hormone) decreases. Furthermore, the production of ACTH by the anterior pituitary neurons decreased, which responded with a decrease cortisol adrenal cortex. (Alexy 2005, Dror Avisar, 2008).

CONCLUSION

SEHAT Syukur Selalu Hati dan Tubuh is constructed based on the needs of breast cancer patients. In major, distress experienced by breast cancer patients may increase the negative perceptions and emotions that seems difficult to control. SEHAT Syukur Selalu Hati dan Tubuh as a psycho-spiritual method of healing helps breast cancer survivors to always close to the Allah and to help them improve their spiritual intelligence. By implementing SEHAT in daily life, it is clear that cancer is not a frightening disease but it will motivate people to always think positively, to draw closer to Allah and gain a deeper understanding of a good life. In the final analysis breast cancer patients whose emotional and spiritual intelligence are bearing out properly, this would be then the logic is perceived to be SEHAT.

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SELF-EFFICACY ENHANCEMENT DEVELOPMENT MODEL AGAINST BIOLOGICAL RESPONSE ON PATIENTS WITH PULMONARY TUBERCULOSIS IN PUBLIC HEALTH CENTER, SURABAYA

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BACKGROUND

Pulmonary tuberculosis is an infectious disease that caused by bacillus shaped bacteria named *Mycobacterium tuberculosis*. It is transmitted through saliva or sputum mediator that contains tuberculosis bacil which spreads in the air when coughing. Advanced care of tuberculosis management practiced by chronic illness patients is the key of comprehensive disease treatment. The patients will manage the disease properly and obey the medication if they have knowledge, skill, and self-efficacy to perform pulmonary tuberculosis management. Thus, self-efficacy determines how the individual feels, thinks and motivates his self to act and behave.

Stressful condition which is experienced by the patients, physical and/or emotional, stimulates hypothalamus in brain to secrete cortisol (Guyton, 2012). Furthermore, cortisol elevation in tuberculosis patients can cause the complication (Aditama, 2001). Stress control action is a kind of attempts to prevent immune system deterioration and excessive metabolism (Sherwood, 2001). Tuberculosis patients as holistic person are regarded comprehensive, include biologic, psychologic, sociologic and spiritual dimensions, who have intact, unique and complex personality (Govier, 2000).

In 2011, World Health Organization (WHO) predicted 8.7 millions new tuberculosis cases occurrence globally, which is equivalent with 125 cases per 100.000 populations. Most of the predicted cases in 2011 occurred in Asia (59%) and Africa (26%). WHO set 22 countries as high burden countries (HBC) which has high pulmonary tuberculosis problem. Nowadays, Indonesia is included in world top four of countries with tuberculosis burden after India, China, and South Africa. Estimation of pulmonary tuberculosis cases prevalence in 2012 was 600.000 cases, the estimation of incidence was 450.000 new cases per year, and number of pulmonary tuberculosis mortality prediction was 65.000 incidents annually (WHO, 2012).

East Java province is a region which has second largest tuberculosis cases (13%) in Indonesia. The performance of tuberculosis control program in 2011 showed five districts/cities in East Java have Case Detection Rate (CDR) less than 70 percents and Success Rate (SR) less than 90 percent, those are: Surabaya City, Blitar, Pacitan, Sidoarjo and Sampang. The mortality of tuberculosis in Surabaya City was predicted run into 10.108 cases of acid-fast positive bacteria. In 2012, Perak Timur Public Health Center was the top of the most pulmonary tuberculosis cases. There were 114 cases, with details: 47 cases of acid-fast positive bacteria (60% male, 40% female) and new cases of acid-fast negative bacteria, positive rontgen and pulmonary edema were 67 cases (63% male, 37% female). According to the data of Perak Timur Public Health Center, in 2013, the number of suspect were 323 cases, and acid-fast positive bacteria cases were 88 cases (76 adults, 12 children).

A couple of tuberculosis control attempts had been explored and promoted by WHO, those are: complementary treatment and innovative activities which involve national and international resources, including: collaborative activities between tuberculosis and HIV control program, management strategy for patients with drug resistant, tuberculosis control maintenance for risk group and marginal society, increase access to the quality of tuberculosis drug supply, empower

society and family through social mobilization, effective health education to treat tuberculosis in community and enhance independency of patient with tuberculosis during caring activity (WHO, 2006).

Stress change due to fear and anxiety will stimulate hypothalamus to secrete corticotropin releasing factor (CRF) which causes hypophysis gland secreting adrenocorticotropin releasing hormone (ACTH). ACTH stimulate adrenal cortex to secrete cortisol (McArdle, 2007). Increase of cortisol secretion in patient with pulmonary tuberculosis will leads adverse complication (Aditama, 2001). According to Sherwood (2001), cortisol canaffectsimmune system reduction and leads body metabolismexcess.The immune systemprotectshuman body from tuberculosis bacteria infection through the role of Cell Mediate Immunity (CMI) or cellular immunity. The cells consist T-lymphosite and macrophague which can protect body from two phases, pre-erythrocytic phase and parasite erythrocytic phase (Margono, 1980). T-lymphosite consist two types of cell: T-helper cell (Th Cell) or T Cell CD4 (Cluster of Differentiation) and T-suppressor Cell (Ts Cell) or T Cell CD8. T Cell CD4 has cell polarization based on cytokines profile, those are: Th1 and Th2 Cell group. Th1 Cell produces interleukin 2 (IL2) and interpheron gamma which has protective role to strengthen macrophague killing and digesting phagocytized microbas.

METHOD

This research conductedquasy experimental with non-randomized control group pretest posttest design. The number of sample were 42 respondents (21 respondents were treatment group and 21 respondentsswere control group). The treatment group and control group respondents lived in working region of Public Health Center of Surabaya City. Research sample were tuberculosis patients who did not have serious complication or did not treated in hospital and agreedto be respondent. Intervention variable (independent) on this research wasself-efficacy enhancement development model , while the outcome variable (dependent) was biologic response (cortisol levels) of patients with pulmonary tuberculosis. The self-efficacy enhancement development model hadbeen conducted in4 (four) meetings, every taking drugs in public health center (once in two weeks) or home visit during 8 (eight) weeks.

Self-efficacy enhancement development model has been applied through counseling and demonstration methods.Self-efficacy enhancement development model module contents included: development of self-efficacy enhancement and basic concept of pulmonary tuberculosis disease, the magnitude of difficulties which were faced by the patients in relation with their attempts to overcome the disease and pulmonary tuberculosis medication tenets,general condition of the behavioral ability coverage and independent activities of pulmonary tuberculosis patients at home, andthe strength of individual beliefs associated withtheir ability and the treatment for patients with pulmonary tuberculosisat home. Data collection used questionnaire and blood sampling to measure cortisol levels before and after the treatment. Bivariat analysis was conducted to prove differences before and after applications of the self-efficacy enhancement development model using Paired t Test which had significance level of 5% ($\alpha = 0,05$). To find out the differences between treatment group and control group, this research used Independent t Test.Furthermore, to identify differences of independent variable or the development model variable to biologic response this research applied multivariate analysis (manova) and GLM analysis (mancova), used to analyze influence of confounding variable.

RESULT

Biologic response (cortisol levels) of patients with pulmonary tuberculosis in the public health center of Surabaya City region which was measured before and after interventions through

the self-efficacy enhancement development model between treatment group and control group are resulting data as follows:

Table: The differences of cortisol levels of patients with pulmonary tuberculosis both treatment group and control group in public health center of Surabaya City region.

Group	Count	Pre test	Post test
Intervention	Max	27,25	25,02
	Min	12,77	4,15
	Mean	20,699	12,621
	SD	4,470	6,1460
	Mean difference		-8,08
	Paired t test		0,000
Control	Max	26,24	95,80
	Min	1,04	3,83
	Mean	13,986	21,585
	SD	7,1983	21,3998
	Mean difference		7,6
	Paired t test		0,124
<i>Independen t test</i>			0,003

The table above shows difference of pulmonary tuberculosis patient's cortisol levels before and after the interventions, both treatment group ($p=0,000$) and control group ($p=0,124$). It finds reduction of cortisol levels deviation average value (-8,08) in treatment group and there is elevation of average value (7,6) in control group.

Considering the normal range of cortisol levels, measurement value for the morning sampling is 62-194 ng/ml and the afternoon sampling is 23-119 ng/ml. Samples from all respondents were taken in the morning. Thus, all of the results, regardless treatment group and control group, are changed up or down.

The result of independent t test showed that differences between posttest for intervention group and control group is significant. According to average range value between pretest and posttest, the intervention group result is decreased and the control group result is increased. So, it could be concluded that the differences between cortisol levels of patients with pulmonary tuberculosis is found. Logic and theory became author's consideration to observe those cortisol levels differences. It makes sense if cortisol blood sampling is influenced by stress condition of patients with pulmonary tuberculosis before sampling action, sampling time difference though it was acted in one range, and the moment of sampling action. Cortisol levels reduction in treatment group become foundation that, in theory, self-efficacy enhancement development model could reduce biologic response (cortisol levels) of patients with pulmonary tuberculosis.

DISCUSSION

The results showed that there are differences in cortisol levels among patients with pulmonary tuberculosis before and after the intervention, both in the treatment group ($p=0,124$) and the control group ($p=0,000$). There is a reduction in the difference average levels of cortisol in the treatment group (-8,08) and an elevation in difference average level (7,6) in the control group who received the self-efficacy enhancement development model.

Cortisol is a steroid hormone from the group of glucocorticoids are generally produced in fasciculata zone in the adrenal gland as a response to ACTH stimulation and secreted by the pituitary gland, also as a reaction result of organic hydrogenation group of 11-keto molecule hormone cortisone which is catalyzed by 11 β -hydroxysteroid dehydrogenation of type I enzyme and generally secreted by adipose tissue (fat) and liver (Ganong, 2008). Free cortisol in the blood have a negative feedback on the release of Corticotropin-Releasing Hormone (CRH) from the hypothalamus and the corticotrophin hypophysis. CRH flows through the veins of pituitary portal

system to the anterior pituitary and triggers the secretion of ACTH (Adrenal Cortico Tropic Hormone). CRH response against any negative feedback is following the diurnal rhythm, so both ACTH and cortisol are in larger quantities in the morning and less at night, but in a stress condition, both physical and psychological, like pain, fear, surgery, infection, physical exercise, trauma, hypoglycemia or tumor and medicines like corticosteroid, hypnotic, may change the circadian rhythm.

The half-life of cortisol is 90 minutes. Due to circadian rhythm depend on cortisol secretion, so the normal value is vary according to time of day. The normal value at 09.00 am for a cortisol (11 hidroxcorticosteroid) is 170-720 nmol/l (6-26 µg/100ml), whereas in the midnight (12.00pm) the level is less than 220 nmol (<8 µg/100ml) (Ganong, WF 2008). Cortisol levels is chosen in this research because it has characteristic that the patterns of cortisol secretion is increase and decrease slowly than other stress hormones (e.g. catecholamine) so measurement method is easier to be done.

The physiological responses of the human body which is very susceptible to distress are elevation of cortisol levels. Based on the psychoneuroimmunology concept, through hypothalamus hypophysis adrenal axis, that psychological stress will have an effect on the hypothalamus, then the hypothalamus affects the pituitary and it will express ACTH which ultimately can affect the adrenal glands, where the glands will produce cortisol. If the stress experienced by patients is very high, the adrenal glands will produce cortisol in large quantities so that it can suppress the immune system. (Clancy, 1998).

In patients with pulmonary tuberculosis, the stressors, whether physical, psychological, social, and will be responded by the hypothalamus, so it secretes CRH. CRH response to the negative feedback following the diurnal rhythm, but in stress conditions, the circadian rhythm can be changed. A signal is sent to the pituitary that stimulates the secretion of ACTH. ACTH then captured by cells in the adrenal cortex to secrete cortisol (Guyton, 2012). In modern society, many physical and psychological stressors may increase the incidence of stress especially in patients with pulmonary tuberculosis. Ongoing stress can disrupt the whole immune system. Innate immunity, humoral immunity and cellular immunity (Celluler predator exposure) influence the hypothalamic-pituitary adrenal axis (HPA axis) so it produce the cortisol. The effects of cortisol are then distributed to various receptors that make a person more susceptible to infections.

Acceleration of adaptive responses in this disease affects coping mechanisms and reduce the activity of the HPA. Decrease in HPA activity affect the decrement, both on production and secretion of neuromodulators and neurotransmitter (Ader, 2003). In a study group of patients who receives self-efficacy enhancement development model showed a significant reduction in cortisol production.

CONCLUSION

In this research show that the self-efficacy enhancement development model againsts biological response play a role through regulatory changes in the admission process of the disease, so it can decrease the psychological responses, through anxiety reduction regulation, and can reduce cortisol which induces the immune system to destroy tuberculosis. Self-efficacy enhancement development model againsts biological response can regulate psychological response, resulting in decreased cortisol which induces an immune system and would damage or destroy the tuberculosis, so it can be concluded that accelerating the success of treatment process will be followed by a high cured rate in pulmonary tuberculosis. Further studies need to analyze another way of self-efficacy, which do not through the hypothalamus adrenal and stress is not related to self-efficacy but the test results of cortisol reduction, in effort to explore and develop beneficial

nursing interventions to increase self-efficacy, treatment compliance, and quality of life of patients with pulmonary tuberculosis.

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PERCEPTION OF INDONESIAN NURSING STUDENTS REGARDING CARING BEHAVIOR AND TEACHING CHARACTERISTICS OF THEIR CLINICAL NURSING INSTRUCTORS

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ABSTRACT

Introduction: Clinical nursing instructor have crucial role in development of professional progression of nursing students. Clinical training is far more important in nursing education to become a professional nurse. Student's learning and performance reflects the professional attitude, behavior, ethics and standards of their instructors. The aim of this study is to analyse the perception of Indonesian Nursing students regarding caring behavior and teaching characteristics of their Clinical Nursing Instructors.

Method: In this exploratory cross-sectional study 149 (48 male and 101 female) Professional Nursing students from Regular program (Baccalaureate) and Post diploma BSN and 15 (5 male and 10 female) Clinical Nursing Instructors were recruited from nursing faculty of public university located in Surabaya Indonesia. Data were collected by following two steps; in the first step questionnaire were distributed to the students and Clinical Nursing Instructors, in the second step FGD was conducted to explore detailed information and their recommendations to upgrade the lacking and areas which needs improvement.

Result: Data collected from students was analysed by using logistic regression test. Descriptive statistical analysis was used to analyse the job responsibilities of CNI, 13.3 % CNI thought that they are overburdened where as 86.7 % feels that their responsibilities are fare enough according to their job position. On the other hand 6 % students perceived the caring behavior of their clinical instructors as low, 52.3% responds it as enough and 41.6 % considered it good. Teaching characteristics of CNI; 2.7% low, 26.8 as enough and 70.5 % good as perceived by their students. In focused group discussion students recommended to increase the number of visits in clinical area and emphasises on bed side clinical demonstration.

Conclusion: Overall students respond as moderate level of satisfaction with the caring behavior and satisfied with the teaching characteristics of their clinical nursing instructors. Clinical instructors needs to focus on student's strength and learning as an individual. CNI needs to be flexible, have open communication and pay some attention to new teaching-learning methods.

Key words: Caring behavior, Perception of nursing students, teaching characteristics, CNI

PRIDE AS THE ATTITUDE TO OPTIMIZE THE NURSE PERFORMANCE

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The central issue currently developing for Indonesian nurses is the globalization era with MEA (Masyarakat Ekonomi Asean/Asean Economic Community (AEC)). Nowadays, the nursing profession in the country in demand to be able to compete by improving the quality of nursing care. One of the foundations to improve the quality of nursing care is a nurse must have a sense of pride as a professional nurse with the competence to face internal and external challenges. Restructuring internal challenges focuses on four-dimensional domains: the nursing science, nursing services and nursing care, nursing practice and nursing career in the service. External challenges in the form of demands for registration, license, certification is about nursing practice legislation, competence demand and disease patterns changes, increasing of public awareness of the rights and obligations, the national education system changes, as well as other related supra systems and institutions changes (Nursalam, 2014).

Sense of pride as nurses, should be owned and continued to grow in Indonesian nurses to improve self confidence amid global society nowadays. Sense of pride as a professional figure who will be able to give a great contribution in improving the quality of nursing service, to prove the identity of nurses as professionals with all the attributes attached to them. Pride as a nurse is a thing that should be existed and continued and grown in order to improve the nurse image, with the nurse professional identity as a care provider, educator, community leader, manager and researcher.

The growing issue is the competition in various services to the community, has an impact on the increasing demand for health human resources quality, improvement of services, and the availability of various alternative treatments in health care arrangements. Nowadays, we do not realize that the rapid development of science and technology coupled with the influx of foreign workers occur everytime. Science and technology deployment conditions, entry and spread of various kinds of goods and services become increase very rapidly due to the rapid development of transportation and telecommunications technologies, including the exploitation of some aspects of the free trade market.

Changes to various aspects of health care services bring consequences to nursing, particularly the public demand for more professional nursing role. Human resources of nursing should be prepared comprehensively and holistically from the side of condition or phenomena grown nowadays. Although, there are not many foreign nurses relatively come to Indonesia but the threat of the acceleration should not be underestimated. Society is constantly evolving and changing, so it is with the nursing profession. The various factors change or shift that affects nursing, there will be a change or shift in nursing, either a change in service / nursing care, nursing science and technology development, as well as changes in the nursing field, both from the perspective of nursing in the context of science and professional contexts. Nurses must have a sense of pride as nurses so they can take on the role as a change agent, and they should be proud as an agent of change, which in turn can improve the capability and competence and improve the performance of professional nurses.

Pride is a form of attitude in a person which occurs as a result of the internalization of a person's sense of wonder to the environments outside of himself/herself or for himself/herself

(internally). Pride is an important attitude in understanding human behavior. Pride in a person can be built by the commitment, status, achievement and success, ability and willingness. The pride of the nurses' profession provides positive benefits to the nurses themselves, including the opportunity to pursue a career in an appropriate nursing, to contribute, or to empower. Pleasure and pride make nurses more committed provide nursing services and feel more comfortable with the nursing profession. Even the nurses would be willing to sacrifice and make every effort to defend the survival and the greatness of their profession. Nurses will be very offended and angry if there is someone who underestimates the nursing profession even they defend desperately if there is someone insults their profession. Being proud as a nurse will trigger the nurses' spirit and spur to provide maximal nursing care. Thus, the nurses are able to show better performance (Verbeke, Belschak, Bagozzi, 2004).

Proud to be a nurse is a good thing, it may emerge as figure of nursing leaders and role models provided by the senior nurse, including any inherent or achievements or owned by senior. Admiration for the senior nurses as the figure, who is authoritative, respected, neat in clothing, disciplined, professional, brilliant minds, is a source of motivation and exemplary for the junior nurses. Willingness to provide the best nursing care to patients is done in order that patients' burden of illnesses can be reduced; it provides nurses to have the attitude of pride. The pride fosters confidence in nurses' competencies ability that encourages them to provide quality performance (service or productivity).

Some of the statements expressed by researchers who had conducted research on the study of pride, namely:

1. Pride is an emotion (along with shame) that gives self-esteem which is affective (Brown, Marshall, 2001; Tracy & Robins, 2007), self-esteem, in turn, affects a wide range of intra psychic and interpersonal processes. If pride disappears from someone in the form of insults or ego threats, it can provoke aggression and antisocial behavior (Bushman & Baumeister, 1998).
2. Pride is an emotional peak, perceived by the performance and success (Katzenbach, 2003). An employee is proud of the opportunity to be more involved and motivated to work.
3. Pride is an emotion that is very important to understand human behavior, which is derived from the two elements, self-evaluation and other opinions elements (Arnett, Laverie, McLance, 2002).
4. Pride can strengthen prosocial behavior that usually causes emotions, such as achievement and parenting (Hart & Matsuba, Chapter 7).
5. Pride represents the belief that a person is competent and positive feeling. (Arnett, Laverie & McLance, 2002).
6. Pride is a real form of trust construction. Trust is divided into intra Personal (self-confidence) and interpersonal (trust to others) (g, e, Deutch, 1958, Erikson, 1968).
7. Along with high self esteem (human needs such as status and acceptance) (Tracy, Robins, 2007).

Pride is caused by relevant internal events in the person's identity (Tracy, Shariff, Cheng) as well as one's life so that its presence in a person will always be maintained. Pride can also be a self-conscious emotion that will rise from the achievements of his own abilities. It reflects how a person feels as himself. Pride, however, his presence appeared from himself (Tracy, Robins, 2004,2007).

According to Lewis (1993), Pride can only be called *Pride* when there are various types of cognitive factors related to it. People evaluate or compare their behavior with the standards. However, new theories and findings support the Cooley's and Scheff's views, and suggest that the Pride is an important psychological emotion and adaptive evolutionary. Subjective feeling which is

pleasant, accompanying Pride experience can strengthen prosocial behavior, usually raise emotion (achievement and parenting).

Pride (Pride) is caused by relevant internal events in a person's identity (Tracy, Shariff, Cheng) as well as one's life so it will always be maintained. Pride is a self-conscious emotion that will rise from the achievements of his own abilities. It reflects how a person feels as themselves. Pride, however, his presence appeared oneself (Tracy, Robins, 2004, 2007). According to Lewis (1993), Pride can only be called a *Pride* when there are different types of related cognition factors for himself. People evaluate or compare their behavior with the standards. Nurses pride as sourced from the achievements that have been gained by nursing profession with the development of science and technology, changes and developments in nursing practice. Nowadays, world nursing development and existence get government support from the legalization of Nursing Act number 38, 2014 which put and recognize nurse's contribution, role and function as an independent profession that the practice still collaborates with other health professions in the contribution of health development to the whole Indonesian human health level.

Nurses who have pride as a nursing profession can foster the spirit and motivation to engage in providing high quality nursing service. This is based on the research conducted by Arnett (2002) that a sense of pride in job is the belief that someone is competent in the field which is very important and meaningful. Employees with a high sense of pride are more eager to engage in providing high quality services. Proud as nurses can make nurses feel better with the profession as a nurse and as themselves so it can encourage their self-confidence to show superior performance. The nurses' performance is influenced by the motivation and commitment of the nurses themselves based on the sense of pride owned.

Nurses as service provider are at the forefront of nursing care in hospitals because they work over 24 hours to provide nursing care. Such heavy responsibility demands nurses to have competence and tough mental things. Success in this task fosters a sense of pride as nurses in order that they are motivated and encouraged to participate and show performance professionally to give nursing services.

The nurses' pride can be sourced from the nursing value. According to Nursalam (2014), based on the philosophy and the paradigm of nursing, the value or meaning which can be developed from nursing in the scientific development believed that nursing has three core values that relate to one another: (1) art, (2) Science and (3) a profession.

1. Nursing as an art (art).

Art (art) is a reflection of feelings and perception, because the core and essence of nursing is interpersonal interaction. Art or the ability of self-expression is important to develop one's ability as something unique. Nursing intuition should be identified and supported as an art in nursing. Art embodied in nursing demands a nurse to have sensitivity and responsiveness to client's feeling, as well as the ability to understand the client's non-verbal language. Thus, nurses have creativity to develop the art of nursing. This is one of the nursing prides, which has unique characteristics that any other professions do not have it. When nurses express art in providing nursing services, they feel proud with the nursing profession. It is proud to have art in nursing practice; a nurse is able to give satisfaction optimally to the clients who receive qualified professional nursing care.

2. Nursing as Science (science)

According to Nursalam, 2014 that the concept was developed based on the philosophy and paradigm of nursing. There are three (3) main elements of the nursing philosophy that became the conviction and a process to think critically in developing nursing science: humanism, holism and care. In the development of nursing philosophy, there are 4 (four)

main concepts of nursing paradigm: human, environment, health and nursing. Humans are viewed as holistic and humanistic individuals, where the life is always interacting with both internal and external environments. The environments can affect on human health status. These conditions foster a sense of pride as nurses, because basically humans are endowed with compassion by God and helping each others. When someone can provide both moral and spiritual assistance to others, then it appears satisfaction that eventually becomes a sense of pride. Nurses, directly and indirectly, are always beside the client, when the client requires, they will be present and give attention of "humanistic and holistic" forms that they are able to grow and maintain a sense of pride.

3. Nursing as a Profession (profession)

According to Nursalam (2014), which argued that nursing as a profession should have criteria for a profession, they are: Body of Knowledge, special education based "expertise" in higher education, providing services to the community and practice in accordance with the profession, have association in the profession field, impose a professionalism ethics code and motivation which are "altruistic". Nurses' pride has all the profession criteria, as the nursing profession. Nursing continues to grow in establishing the criteria for the profession, especially benefit of the nursing profession as an effort to contribute to build a healthy community by providing nursing care practices based on professionalism ethics code. Nurses are proud to have a professional organization that are manifestation of the nursing professional associations who have professionalism ethics code. Moreover, the pride of being nurses, realized from the high education qualifications to the doctoral level. It shows that the nursing profession is a profession with reliable nursing human resources. Consolidation of the entire profession criteria are being conducted by the nursing profession to accountability and optimum autonomy of profession implementation. Finally, the most important thing is the Pride is nurses' booster attitude to improve the performance by providing nursing services to the community as a manifestation of professional nursing profession.

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FAMILY SUPPORT AMONG STUDENTS WITH MALADAPTIVE BEHAVIOUR

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ABSTRACT

Introduction : It is the tendency for some adolescence to be maladaptive. This behaviour is sometimes evident as infringement. This maladaptive behaviour in Indonesia is significant. Family as background plays the role in forming a teenagers' behavior. The aim of this oral presentation is to disseminate a study exploring the correlation between family support and maladaptive behaviour among adolescence **Method** : The study was conducted using correlative-descriptive and cross-sectional method. The samples were 135 adolescence both male and female students in a Junior High School in Pekalongan, Central Java, Indonesia. The tools were family support and maladaptive behaviour questionnaires developed by the researcher based on family support and maladaptive behaviour theories. The tools have pass the validity tests (family support questionnaire = 0,371-0,711 and maladaptive behaviour questionnaire = 0,615-0,866). **Result** : The results showed that 64% adolescence have adequate family support and 62,2% performed moderate maladaptive behavior. The result of Spearman Rank statistic test ($\alpha= 0,05$ p value : 0,000) and the correlation coefisien was - 0,528. **Conclusion** : There is a correlation between family support and students maladaptive behaviour. If family support is adequate, so students's maladaptive behavior will decrease.

Key words : Family Support, Maladaptive Behaviour, Adolescence Behaviour

AWARENESS AND BARRIERS TO TB DOTS PROGRAM IN SELECTED COMMUNITY IN INDONESIA: BASIS FOR INFORMATION DISSEMINATION CAMPAIGN MATERIAL

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ABSTRACT

Background. Tuberculosis gets a priority attention in the world. The patients' non-compliance with TB-DOTS included lack of the treatment knowledge. The objective of this study was conducted to determine the relationship of awareness and barriers in participants at the Dawarblandong Community Health Center, Mojokerto, Indonesia. **Method.** Descriptive correlation study was used. The participants were 34 patients who have not taken their anti-TB medication for a period of one month, failed and defaulted treatment based on the patients' medical records from January 1st to December 31st 2013. Statistical data treatment used Pearson r. **Result.** The study showed that majority of the participants have low awareness on tuberculosis disease 20 (59%); most noteworthy was that most of them were unaware of the tuberculosis management 24 (71%). As regards to the barriers in terms of awareness revealed lack of information on how to prevent of disease, and lack of understanding about tuberculosis itself were the primary reasons. With regards to tuberculosis management, the barriers' perceived were the long lines at the health center, works, the feeling of shame and financial constraints. Pearson r test revealed a negative significant relationship exists between level of awareness and perceived barriers in term of tuberculosis disease and tuberculosis management ($r = -0.734$). **Conclusion.** It implies that lack of understanding due to unawareness would increase the perceived barrier to comply in tuberculosis treatment. The findings form the basis of designing an information dissemination campaign about Tuberculosis and the government's TB-DOTS program.

Key words: awareness, barrier, campaign

PRENATAL CARE SATISFACTION IN TEMPORARY HOUSING FOLLOWING NATURAL DISASTER

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ABSTRACT

Introduction: People are displaced to temporary housing following natural disasters. Due to the limited facilities and psychologist condition during stayed in temporary housing, pregnant women and their fetuses tend to develop health problems. Indonesia government provides prenatal care in temporary housing to monitor pregnant women health. Further, prenatal care satisfaction is one of consideration in measuring prenatal care service quality. Therefore, the purpose of this study was to identify prenatal care satisfaction in temporary housing following volcanic mudflow. **Method:** A descriptive study was conducted in Magelang district of Indonesia. One hundred eighteen subjects who had pregnant experience when they stayed in temporary Housing following volcanic mudflow were recruited. Prenatal care satisfaction questionnaire was used to measure the prenatal care service satisfaction. Physician/nurse-midwife-patient interaction, administrative efficiency and staff relationship, physical environment, physical environment, access and resource availability were five sub-variables in prenatal care satisfaction. The expert validity and the cronbach's alpha coefficients (.801 to .864) were achieved. The descriptive statistic was performed. **Results:** The result of this study indicated that the mean values between five sub-variables were from 1.69 to 1.79. Furthermore, the highest mean value between five sub-variables was quality (1.79), and the lowest mean value was access and resource availability (1.69). Thereby, the overall of mean value of the each item in prenatal care satisfaction were less than 2.1. **Discussion:** In sum, prenatal care service did not well implement. Indonesia government and non-government organization which involved in disaster management should provide specific attention to enhance prenatal care service following an expected even such as natural disaster.

Keywords: prenatal care satisfaction, temporary housing and natural disaster.

INTRODUCTION

Natural disaster is incidents that cause damages, disruptions and deterioration into whole aspects of human being which require help from others (WHO, 2002). A volcanic eruption is one kind of natural disaster, which is usually followed by another prolong event of natural disaster called volcanic mudflow. In 2011, which reported that seven villages in Magelang district were drowned by volcanic mudflow, and the citizens including the pregnant women were transferred to the shelter and continuous to temporary housing with the

time frame which cannot be determined (Indonesia National Disaster Management Agency, 2012). Pictures of temporary housing were described by Callaghan et al. (2007) and Fan (2012) as a crowded place and have limited facilities and infrastructure. Consequently, people who live in temporary housing have risk of public health problems including pregnant women (Callaghan et al., 2007; Fan, 2012). Pregnant women who are exposed to a natural disaster may experience reducing of fetal growth, and increasing a number of maternal complications, low birth weight as well as preterm birth infants (Carver

et al., 2012; Harvielle, Xiong, & Pierre, 2011; Tong, Zotti & Hsia, 2011). During Merapi eruption and volcanic mudflow in 2011-2013, there were 472 pregnant women receiving prenatal care service from several public health care service in Magelang district (Indonesia Ministry of Health, 2011).

Prenatal care is a specific health care service to maintain and monitor pregnant women's health status as well as their fetus and to detect the early signs or risk factors of abnormal conditions or diseases that occurred in pregnant women, and providing effective interventions to reduce maternal morbidity and mortality rate (Hollowell, Kurinczuk, Oakley, Brocklehurst, & Gray, 2009; Lumbigan, Narong, Chompilas, & Kamron, 2004; WHO, 2003). The thing that should be considered is the success of achievement in prenatal care service is influenced by the prenatal care service quality which provided. The quality of prenatal care service can be assessed by measuring pregnant women satisfaction in prenatal care service (Raube, Handler, Rosenberg, & Kelly, 1998). However, it is still unknown to what extent the prenatal care satisfaction in temporary housing during volcanic mudflow. Therefore, this study focuses on the prenatal care satisfaction in temporary housing following volcanic mudflow in Indonesia. The purpose of this study was to identify prenatal care satisfaction of pregnant women in temporary housing following volcanic mudflow.

RESEARCH METHOD

A descriptive study was performed. The population in this study was women who had pregnant experience when they lived in temporary housing in Magelang, Centre Java, Indonesia. This area is chosen by researcher because the higher numbers of refugees who got pregnant after volcanic mudflow stayed in Magelang (Ministry of health, 2010). The total households who live in temporary housing of Magelang were 427 (Indonesia National Disaster Management Agency Report, 2012). Purposive sampling was performed in this study. The inclusion criteria of study subjects were women willing to participate in this study, able to read in Bahasa, and had opportunity to get prenatal care when they

lived in the temporary housing. The exclusion criteria were pregnant women who were having abortion and/or mental health problems experience when staying in temporary housing. One hundred eighteen subjects who had pregnant experience when they stayed in temporary Housing following volcanic mudflow were recruited.

Prenatal care satisfaction is health care service for pregnant women which is provided by government during staying in temporary housing. Twenty two questions in the questionnaire are adopted from prenatal care satisfaction questionnaire which is developed by Raube, Handler, and Rosenberg. Raube, Handler, & Rosenberg (1998) used the questionnaire to measure the prenatal care satisfaction among low income women on six dimensions including art of care (7 items), technical quality (4 items), physical environment (4 items), access (4 items), and availability (2 items). However, in this study sub-variable access and availability become one sub-variable. The scale of this domain is ordinal data from one to five likert's scale (one is poor and five is excellent) which have appropriate cronbach's alpha coefficients ranging from 0.73 to 0.95. The reliability of this instrument was conducted as same as the previous instrument. For instant, the result of cronbach's alpha coefficients for population in this study was from .801 to .864. In data collection, the research permits were issued by Indonesia ministry of health. The principal investigator and two trained research assistants collected the data. The ethical clearance was issued by Indonesia ministry of health. None of the subjects was canceling to join in this study. Descriptive statistic was used to describe the data.

RESULT

There were five sub-variables in prenatal care satisfaction. The mean total of prenatal care satisfaction was 1.71 and the standard deviation (SD) was .75. The mean values between five sub-variables were from 1.69 to 1.79 (SD .56-85). Furthermore, the highest mean value between five sub-variables was quality (1.79), and the lowest mean value was access and resource availability (1.69). Thereby, the overall of mean value of the each item in prenatal care satisfaction were less than 2.1 (Table 1).

DISCUSSION

The average of pregnant women satisfaction level on prenatal care service in

Magelang temporary housing was on the low-level of prenatal care satisfaction. Aharony & Strasser (1993) stated assessing pregnant

Table 1. Prenatal Care Satisfaction

Variables	Mean± SD	Min-Max
Physician/nurse-midwife-patient interaction	1.71±.79	1-4
Comfort shown by doctors or nurse-midwives	1.70±.80	1-4
Thoroughness of examinations	1.69±.83	1-4
Explanation of procedure	1.65±.70	1-3
Concern shown by doctors or nurse-midwives	1.79±.82	1-4
Administrative efficiency and staff relationship	1.71±.76	1-5
Respect shown by nurses or receptionists	1.61±.78	1-5
Waiting time at office or clinic	1.56±.76	1-5
Concern shown by nurses or receptionists	1.86±.85	1-5
Comfort shown by nurses or receptionists	1.72±.75	1-4
Waiting time to get an appointment	2.06±.56	1-4
Atmosphere of waiting room	1.41±.63	1-4
Physical environment	1.70±.67	1-4
Location of office or clinic	1.86±.63	1-4
Modernness of medical equipment's	1.65±.68	1-4
Attractive of office or clinic	1.60±.66	1-4
Technical Quality	1.79±.79	1-5
Cleanliness of office or clinic	1.90±.75	1-5
Technical skills of doctor or nurse-midwives	1.84±.85	1-5
Respect shown by doctors or nurse-midwives	1.66±.68	1-4
Equity of treatment	1.74±.85	1-5
Access and resource availability	1.69±.74	1-4
Comfort of the waiting room	1.63±.79	1-4
Availability of doctors or nurse-midwives	1.63±.72	1-4
Hours of office of clinic	1.67±.74	1-4
Availability of nutritional service	1.77±.65	1-4
Helpfulness of advice	1.77±.81	1-4
Total	1.71±.75	1-5

Prenatal care satisfaction questionnaire is developed by Raube, Handler, and Rosenberg (1998)

women satisfaction on prenatal care is needed to identify the prenatal care satisfaction service outcome as well as indicator of prenatal care service quality. The quality of prenatal care satisfaction service in temporary housing related to physician/nurse-midwife-patient interaction, administrative efficiency and staff relationship, physical environment, technical quality, access and resource availability were on the range poor to fair level. This condition might influence the prenatal care satisfaction service outcome in temporary shelter after natural disaster. Hence, Indonesia ministry of health as a public agency which has responsible to provide health care service in disaster management might needs to investigate and evaluate the implementation reproductive health service regarding prenatal care service in temporary housing after natural disaster. Further, there is recent evidence that need to be considered related to patient satisfaction on prenatal care service. Ejigu,

Woldie, & Kifle (2013) found that the dissatisfaction of prenatal care service is reported by pregnant women who received incomplete service service items. Hence, prenatal care service satisfaction of pregnant women might be influenced by comprehensiveness of prenatal care service received.

CONCLUSION AND RECOMMENDATION

Conclusion

In addition, this study indicated that pregnant women stay in temporary housing and received prenatal care performed dissatisfaction almost in all of five dimensions.

Recommendation

Government and others agencies who will involve in disaster management should provide specific attention related to prenatal care service which is focus in several

dimensions including physician/nurse-midwife-patient interaction, administrative efficiency and staff relationship, physical environment, technical quality, access and resource availability.

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NURSE ROLE ON BUILDING COMMUNITY RESILIENCE IN MERAPI: PREPAREDNESS PHASE

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ABSTRACT

Introduction: Mount Merapi in Yogyakarta is one of Indonesia's phenomenal volcanoes. This mount erupts predictably every 3-5 years. One of the most eminent eruption happen in 2010. Community resilience development would prevent huge loss and damage from the event. **Method:** This paper critically examines the available literature that explores problems and nurses roles in building resiliency of Merapi's community. Examining the problems that occur in Merapi eruption, and finding the literature to answer the problems and encourage the nurse to building community resilience. **Results:** There were several problems identified. The risk perception, by letting the community knows about the information to recognize the damage cause by disaster. Then, the cultural and religion approach is the key action in building community trust. By understanding the culture, the nurse can emerge with the community and empowering them. The last part is the social, economic and politics. The nurse role and function in building the community resilience by educating and empowering the community to recognize the risk, diagnose the problem, and implementing the preparedness. **Conclusion:** Yet, more studies need to conduct to find more evidence related to disaster preparedness and community resilience and using the cultural and religion approach
Key words: community resilience, nurse role, volcano eruption

INTRODUCTION

Indonesia is a supermarket for disasters, such as earthquakes, tsunamis, and volcano eruptions (WHO, 2010). Particularly Yogyakarta, located in Java. It was reported that within these two decades, Yogyakarta had 2 big disasters which were Bantul earth quake in 2006 and the latest one Merapi volcano eruption in 2010. Interestingly, Merapi volcano eruption is the most frequent one due to its own regular eruption cycle. Merapi volcano has a history of deadly eruptions in the last century, occurring every 3–5 years. Merapi has displayed both explosive and effusive activity throughout its eruptive history; however, activity over the last 225 years has been dominated by the viscous extrusion of basaltic-andesite lava domes and subsequent small gravitational, or explosive, dome collapse (Camus et al., 2000).

Merapi volcano is one of the most active volcanoes worldwide, with more than 70 eruptions since 1548 (Voight et al., 2000). Since the fourteenth century, 61 eruptions of Merapi have killed over 7000 people (Lavigne et al., 2000). Notable among these was the eruption in 1672, which killed 3000 people, and the highly explosive eruption in 1872, which killed 200 people. More recently, the eruptive events in 1930–1931 and 1954 killed 1400 and 54 victims respectively (Thouret et al., 2000). In 1961, a 12-km long pyroclastic flow destroyed more than eight villages along the Batang River, killing six persons and in November 1994, a pyroclastic flow reached 7 km distance down the Boyong River (Wilson et al., 2007). Due to the unpredictable nature of the 1994dome's collapse, the lack of short-term precursors (Voight et al., 2000) and the presence of a hill which triggered a decoupling of the dilute ash-surge from the basal valley-

confined flow, 69 people were killed by pyroclastic flows and 6000 people were evacuated during and after the 1994 event (Abdurachman et al., 2000). And in 2006, an avulsion of a pyroclastic flow killed two people near the Gendol river channel at Kaliadem village. More than 22,000 people were evacuated in 2006 (UNOCHA, 2006) and the Kaliadem touristic area located on the upper Gendol river was buried by a pyroclastic deposit (Charbonnier and Gertisser, 2008). 324 people died and 598 people are hospitalized due to severe burns, respiratory problems, and broken bones. Moreover, The National Disaster Management Agency (BNPB) had at its disposal IDR 397 billion to help disaster victims.

Considering that every disaster often pose temporary and long-term threats to public health and government, some strategies are needed to develop by involving the community surrounding. Since under resourced communities are at high risk for adverse outcomes owing to pre-existing disparities in health, access to services, and environmental risks. Large-scale events disrupt physical, social, and communication infrastructures posing challenges to response, and creating “surge burdens” that overwhelms care resources and strain social supports. Events such as Merapi eruption have increased goverment awareness of the impacts of disasters and of gaps in communication, infrastructure, and resources that limit capacities to respond and recover. Today, there are 1.1 million people living on Merapi slopes and these communities need more attention in in the terms of preparedness in Merapi eruption strike (Camus et al., 2000). Learning from the big impact of Merapi eruption in 2010, The National Disaster Management Agency of Indonesia (2013) recommend some strategies especially in disaster risk reduction by developing a better governance in DRR, strengthen the law/ policy, strengthen partnership with the key basic elements of the disaster management by change the paradigm

of effective DRR through building community resilience and empower the community.

Community resilience (CR) is one paradigm that has emerged both national and international. The Community and Regional Resilience Institute defines community resilience as not only prepared to help preventer minimize the loss or damage to life, property and the environment, but also it has the ability to quickly return citizens to work, reopen businesses, and restore other essential services needed for a full and swift economic recovery (Chandra et al, 2013). Based on a community systems model, CR refers to community capabilities that buffer it from or support effective responses to disasters. Such capabilities include effective risk communications, organizational partnerships and networks, and community engagement to improve, prepare for, and respond to disasters. These capabilities may improve outcomes such as access to response and recovery resources, or return to functioning and well-being.

BUILDING RESILIENCE IN MERAPI COMMUNITY

Special Issue In Merapi Eruption

Community resilience is a multidisciplinary approach and it involves a complex interaction of individuals, families, groups and the environment (Zang, 2011). To deal with community resilience attention must be given to the contextual condition of society, notably to issues vulnerability (Tobin, 2012). Therefore, when nurses are going to develop some strategies in strengthen the community resilience; nurses have to examine some specific aspect within the community. Lavigne et al (2008) revealed some interesting issue within Merapi community;

Risk perception

In Merapi study it was found that the information among the residents about actual process of volcanic eruption and the information of hazard and risk that caused by volcano eruption were poor. Even though, there is no valid information about how poor of information about the eruptions process in this

community. The information about the volcanic eruptions process and hazard caused by eruption may they get from different sources (Lavigne, 2008). The internal sources were from the past experience in the eruption. As we know the merapi had been erupted for more than 10 times in the past century. For those citizens that have the past experience may have many information about the volcanic eruptions process. The other source is the external sources that may address by the teacher, journalist and local authority. And all of these information is not spread equally within the community.

Besides the poor information about risk perception of volcanic eruption, safety feeling is also essential. People in Merapi have their own belief of their safety. They have the traditional early warning system called “kentongan” to warn them if the volcanic eruption may harm them that control by the key person (java:jurukunci) not the government. In addition, they also feel safer due to the contour of Merapi to their village. People who lived in the flanks of Merapi feel more protected from pyroclastic flows by Sabo Dams, whereas such concrete structure tends actually to raise the riverbed and therefore to increase the pyroclastic surge hazard (Lavigne, 2008). Therefore commonly people live near the Sabo Dams will be protected from the hazard. However, people do not realize that currently the Merapi eruption pattern is changing (Subandrio, 2010). Therefore, a new evacuation route is emerged.

Evacuation way is one of priority in eruption. People in Merapi beside have strong belief in merapi contour that will protect them, they also has their own evacuation way. The government built this evacuation route. However, there are some issues that the evacuation sign was written in Bahasa..Most of people in Merapi has low education since the population mostly over >50 years. They communicate using traditional way, using traditional language, Java which is totally different fromBahasa. So this language barrier may prolong the evacuation process.

Cultural & Belief

Specific efficacy belief is the most powerful determinants of behavior, risk reduction behavior can be encouraged by integrating hazard education within the community development progress (Paton, 2001). Local people in Merapi area are very strong attached to their home village (Tobin, 2012), so that one main point to assess the community development is through its cultural and belief. All Indonesian volcano has its own legends, so does Merapi. As other Indonesian volcano, Merapi's legend also involved Gods, Prince, Princess and mortals. The type of society that very strong in culture and belief could affect the risk perception. It is not only about culture and belief, the whole legends is about religion, its Hindu and Budha the first religion that come to Indonesia may affect the legends. Therefore, involving cultural leader in building Merapi community resilience is very important.

Social economic and politic

Two most important factors in socio economic and politic that need to be assessed are: 1. Traditional social factor; 2. Difficulties in assessing the live hood before and after the disaster. Merapi residents mostly are aged over >50 years old. One of the cultural in Merapi society is respect the older opinion as a counselor the decision making. The decision to evacuate or comeback to a hazardous area after having moved is usually taken as a community decision, where the chief of village (*kepala desa*) as the representative of the government plays the important role than the one played by authorities (Lavigne, 2012). However, the *jurukunci* (cultural leader) plays much more important role, especially for the elderly. *Jurukunci* is appointed by the traditional king/kingdom in Yogyakarta, as the result of the strong cultural, beliefs and religion factors. The *jurukunci* believes that he could talk to the spirit of the mountain, so he could predict the eruption or know the damages that will cause from the eruption, he also may suggest many

kind of ceremony to calm down the angry of the mountains' spirits.

Another thing is occupational issues. Most of the people in Merapi depends their life in farming. They have many cattle and farm field. In order to keep their property, most of them bring their cattle (cows, chicken, and sheep) to the shelter during the evacuation. This condition is even worsen the shelter condition. The market conditions also we have to consider the most. How people in merapi sloes and flanks live it depends on the farming, when lava flow their farming, then they could not have the harvest to make the money. They will be back immediately to their home if their think the situation is better, because they have to earn money for living. Therefore, nurses play very important role in this situation. How

should have regular hemodialysis, etc. Therefore, when disaster strikes, nurses have already prepared some strategies to maintain residents' medication. Besides, sustaining an overall level of physical health, or psychological wellness is also important, by providing individuals with coping resources. Pfefferbaum et al. (2008) propose that population wellness, in measuring overall mental health and quality of life, serves as an appropriate indicator of community resilience and adaptation.

The second key component in preparing community resilience is social-economic factor. The root of social and economic equity is socioeconomic status (SES). The core components of SES are education, income, occupation, and wealth. In

Core Component of Community Resilience in Public Health Setting

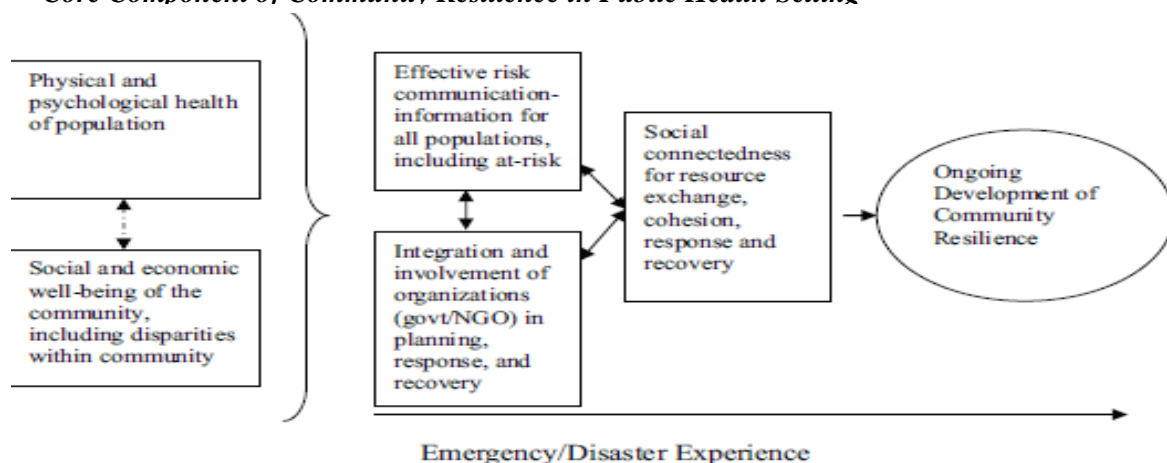


Figure 1: developed a model for building community resilience Chandra et al (2013)

nurses can help them fulfilling their basic need by corporating with NGO and government to also prepare a temporary market for them is nice to think.

Figure 1 is a rough schematic outlining how these components may fit together. In the figure, the underlying health (physical & psychological) and economic well-being of the community affect the ability of the community to respond and recover quickly. It is critical to have data about the vulnerable population within the community. For instance, nurses have to know how many of the residents undergoing TB medication, how many of them

general, disaster response activities can include leaving an area ahead of a disaster and returning once the disaster has subsided. However, low-income populations may not own cars or have accessto extra cash for temporary housing (Morrow, 1999). Moreover, a low SES, cultural and linguistic barrier can shape communication and meaning, perceptions of risk, and the capacity to understand public health messages making these peopleless likely or able to respond appropriately to a significant health incident. Therefore, in this situation, public health and emergency managers can do several things

including creating evacuation plans that do not rely on individual resources and providing premade home disaster kits for low-income populations (Wells et al, 2013).

Next, the engagement of all types of local stakeholders (government, local organization, and cultural leader) in preparedness planning as well as efforts for communicating risk effectively is essential, particularly for sub-groups at greater risk. Effective risk communication is essential to resilience because on the most basic level, it protects physical health by providing accurate information about dangers and behavioral options for mitigation. It increases knowledge and therefore strengthens a community's adaptive capacity. In addition, effective risk communication builds trust and overcomes distrust, which can have important consequences for mental health, likely adherence to government recommendations, and social cohesion. Effective risk communication means selecting messages, messengers, and strategies for delivery that succeed in disseminating risk information across the stages of a disaster. The risk communication process begins before an event occurs. Communications must be offered in multiple modes (using pictorial media and trusted messengers in addition to written materials) as well as in multiple languages. If we implement the effective risk communication in Merapi area, then we have to consider the elderly population, which is the highest proportion in the Merapi. In giving some education or even evacuation route, nurses have to choose the right approach to elderly. For example, by giving the educational program in local language (java language), providing traditional alarming system (using bamboo's sound), or even by providing the evacuation route in java language will be more effective.

Finally, social connectedness is important for health security because social networks can be used for information and resource exchange before, during, and after an event (Plough et al, 2013; Wells et al, 2013).

Social connectedness refers to the personal (e.g., family, friend, neighbour) and professional (e.g., service provider, community leader) relationships among community residents. When residents have relationships with other members of their community it increases their attachment to the community, access to real and perceived social support, social capital (i.e., feelings of trust and norms of reciprocity that develop as a result of relationship; and promotes a sense of community i.e., "a feeling that members have of belonging) (Pietrzak, 2012). Research has shown that individuals who live in communities with these characteristics have better psychological, physical, and behavioral health (Varda et al., 2009).

All in all, these five components contribute to the development of community resilience, which is further enhanced by continued learning that emerges from on-going disaster experience.

Nurses' Role in Building Merapi Community Resilience

In building Merapi community resilience nurses can adapt Chandra et al (2013) model to play the roles.

- ✓ Surveillance for current health status of community
Prior significant public health incidents highlighted how the underlying physical health of the population (e.g., the number of residents with chronic conditions) can greatly affect the community's ability to respond and recover. By knowing the vulnerable population (elderly, pregnant women, children, chronic disease patients) will help the nurses build a resilience in preparedness phase.
- ✓ Health education for all communities member (psychosocial needs, hygiene, etc)
Adequate health education in preparedness phase do make different. At least it will give the communities a prior knowledge related to disaster. In Merapi communities, besides focus in

psychosocial issues, hygiene in shelter is also important due to the over-crowded shelter and sometimes people tend to bring their chattel to the shelter.

- ✓ Build health system planning for disaster preparedness (clinic, shelters, etc).
Even though many shelters have been built, only few of the shelter are completed by clinics. Involving nurses in building the shelters may become a good idea. Nurses also can increase the community resilience in merapi eruption, for instance by providing some tools kit for eruption for each family that contain face mask, coat, etc that will protect them from the volcano ash in merapi eruption (Chandra et al, 2013).
- ✓ Together with government and local organization campaign community preparedness communication resilience (Wells et al,2013; Plough et al, 2013; APEDNN & WHO, 2012) and holding a drill esp. evacuation. Tobin (2002) proposed the mostimportant thing to prepared in volcano eruption in how we prepare the evacuation route.

CONCLUSION AND FUTURE CHALLENGES

Nurses are not only being resilient individuals, but also have to prepare their clients' resilience within ecosystems (Fritsch&Zang, 2009). Optimizing nursing role in disaster resilience is a new challenge because only few of the literature in resilience are from nursing point of view. Lately many nursing organization try to raise nurses' role in resilience (APEDNN & WHO, 2012), by implementing the evidence in the field can support nurse roles and functions in disaster field. Performing a drill is one of important key point. The corporation between government, local organization, and cultural leader is considered as basic component in order to strengthen the cohesiveness as well as resilience within the community.

A few reseacrh has been done by Indonesian regarding disaster especially

resilience in Indonesia. Conducting more research is a challenge for Indonesian nurses to dig up more evidence related to disaster. Another challenge for Indonesian nursing scholar is the cultural and religion diversity. Cultural diversity has also not been well-addressed with respect to constructs of resources and community (Hobfoll et al., 2007; Norris et al., 2008). Some cultural backgrounds may react differently towards disaster. As we can see in the Merapi community, disaster planning should involve cultural leaders and additional research on this topic should seek to identify “non-traditional resources” that foster resilience in diverse cultural groups.

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HEALTH VOLUNTEER'S ROLE ENHANCEMENT AS A CHANGE AGENT OF LEPROSY RELATED STIGMA AT COMMUNITY BY USING TRAINING

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ABSTRACT

Introduction: Leprosy is a chronic infectious disease that has stigmatised people affected since ancient times until now. Misconceptions about the disease have contributed to the development of negative attitudes to leprosy affected persons. Increasing community's awareness to eliminate the negative stigma for leprosy patients and former leprosy patients can be done by empowering community. Training for health volunteers are expected can enhance their role as a change agent of leprosy stigma in the community. **Method:** Training was conducted on 30 health volunteers at Puskesmas Mulyorejo, Surabaya. Training method includes lectures, discussion, and demonstration. The evaluation was conducted to health volunteer's knowledge about leprosy, rehabilitation of leprosy patients and former leprosys patients, and education as an agent of change on leprosy's stigmatization by using questionnaire. The result of evaluation then presented in frequency distribution and percentage. **Result:** The result showed that before training, 25 (83,3%) health volunteers had less knowledge about leprosy, and the rest had enough. After training, 24 (80%) had good knowledge, the rest had enough, but there were 2 (6,7%) still had less knowledge. The comparison between pre and post score had shown an increase of 25-50 points on 20 health volunteers (66,7%), with the highest score differences was 72 points. However, there were still 1 health volunteers (3.3%) who had no increase. **Discussion:** Training can enhance health volunteer's knowledge about leprosy. The enhancement of health volunteer's knowledge are expected to enhance their ability, willingness, and role as an agent of change leprosy stigmatization in their community. Training for health volunteers need a follow up such as providing media as a tool for them to promote the elimination of stigmatization on leprosy patients and former leprosy patients in their community. Beside that, supervision from community health nurses also needed.

Key words: training, leprosy related stigma, health volunteers

INTRODUCTION

Disability suffered by leprosy patients and former leprosy patients is often considered terrify by others. It will lead to leprophobia. Although they already finished their treatment and declared cured by medical team, the community still labelled them with leprosy for all their life. A leprosy's label which given by the community underlying psychological problems suffered by leprosy patients and former leprosy patients, so that they feel fear, disappointed, depressed, unconfident, shame, worthless, useless, and worry for been isolated

by others. Community awareness for did not exclude the leprosy patients is still low. Big efforts and a couple of time are needed to eliminate that stigma. So that, an effort to change community's view about leprosy patients should begin immediately (Depkes RI, 2013).

Based on WHO report in 2013, the prevalence of leprosy in four early months in 2013 from 115 countries was 189.018 cases. While new cases in 2012 was 232.857 cases. Depkes RI

(2013) stated that number of leprosy patients in Indonesia was still high. Indonesia still becomes the big three countries with highest leprosy cases in the world, after India and Brazil. At 2011, Indonesia reported 20.023 new cases of leprosy. Based on that report, the number of cases with 2nd grade of disability (visible defect), was 2.015 people (10,11%). Leprosy related stigma can cause their rights as a human being and as a part of the community are not being met.

Leprosy has wide effect on the patient's life start from marriage, occupation, personal relationship, business activity, until their attendance at religious events as well as community events. Leprosy related stigma happens because lack of knowledge, misconception, and wrong belief about leprosy as a disease. Misperception about this disease is believed as a main cause of stigma (Leprosy Review, 2005).

One of intervention which conducted by Ministry of Health, Republic of Indonesia in order to cut off leprosy was to eliminate leprosy related stigma by changing people's view about leprosy through intensive health education about leprosy (Depkes RI, 2005). But, there are still some problem, such as lack of human resources at public health center make this program runs slowly. In order to improve the successfulness of this program, help from the community is needed. People's view about leprosy must be changed by empowering the community. The community needs more information and education about leprosy, especially the motor of health on each community, the health volunteers. So that, they can promote leprosy to another family in their area. By eliminating stigma and discrimination to leprosy patient and former leprosy patients, community's behavior to accept them can be increased. This is very important to enhance self confidence of patients and families in their lives.

The health volunteers were a part of community which chosen by and from the

community in order to enable people to be more healthy (Efendi & Makhfudli, 2009). Until today, Puskesmas Mulyorejo already have active health volunteers which run posyandu for under five years and the elders. But, there are no health volunteers who specifically undertaken leprosy's problem in the community. So that, socialization about leprosy for health volunteers is needed. So they can also enhance their role and give correct information about leprosy and take part to eliminate leprosy related stigma.

Improving health volunteers' understanding about leprosy was given thorough training, with self management education approach. Self management education was defined as health education which given in a group, multidiscipline, based on adult learning style, supported by media such as handbook, booklet, manual, etc., And also provide support and supervision from health workers after all of session finished (Barlow, Wright, Sheasby, Turner, & Hainsworth, 2002). In this training, self management education was given in order to change community's perception and induce positive view about leprosy patients and former leprosy patients. Through this training, health volunteers are expected to optimize their role as agent of change leprosy related stigma.

RESEARCH METHOD

This training was conducted at Puskesmas Mulyorejo area. Target of this training was health volunteers who runs posyandu for under five years, 30 health volunteers were involved. Training using self management education approach. Teaching and learning method used was: 1) lectures; 2) discussion; and 3) demonstration. The evaluation was conducted to health volunteer's knowledge about leprosy, rehabilitation of leprosy patients and former leprosy patients, and education as an agent of change on leprosy's stigmatization by using questionnaire. The result of evaluation then presented in frequency distribution and percentage.

RESULT

Table 1 The tabulation of health volunteers score before and after training

Score	Knowledge						Total	
	Good		Enough		Less			
	n	%	n	%	n	%	n	%
Pre	0	0	5	16.7	25	83.3	30	100
Post	24	80	4	13.3	1	6.7	30	100

Tabel 2 Score differences before and after training

Differences	n	%
>50	4	13,3
25-50	20	66,7
<25	5	16,7
none	1	3,3

Table 1 had informed that before training as many as 25 (88,23%) health volunteers have less knowledge, as many as 5 (16,7%) health volunteers have enough knowledge, and none health volunteer have good knowledge about leprosy. But after training, there were 24 (80%) health volunteers have good knowledge, 1 (6,7%) health volunteer still have less knowledge about leprosy, while the rest have enough knowledge.

Based on table 2, known that the comparison between pre and post score had shown an increase of 25-50 points on 20 health volunteers (66,7%), with the highest score differences was 72 points. However, there were still 1 health volunteers (3.3%) who had no increase.

DISCUSSION

The results showed that in the beginning health volunteer has less knowledge about leprosy. It can be proved by a fact that most of health volunteers have low scores and there is no health volunteers who have knowledge in a good category. After training, can be seen that most of health volunteers have good knowledge, although there were still 2 health volunteers on less knowledge category.

The same training about health volunteers' role as an agent of change on leprosy related stigma never conducted at Puskesmas Mulyorejo. A report from the public health center at 2014 had shown that there were none cases of

leprosy who still on a treatment program. But there still some of former leprosy patients. This condition makes health volunteers in this area do not have experience and knowledge about how to manage leprosy patient and former leprosy patients in the community. So that, they have low scores on the pretest.

Training was one of health education. Health education is a process of learning from individuals, groups, communities, from do not know 'till become aware, from unable to overcome a health problem becomes capable. Knowledge happens after people perform sensing on a specific object. Sensing occurs through the human senses: sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Cognitive knowledge is a very important domain in shaping a person's actions (Notoatmojo, 2010).

The result of this training was suitable with that theory, health volunteers' knowledge was increased, as indicated by participants who mostly have less and enough knowledge before training, becomes mostly have good and enough knowledge after training. There are some factors which influenced this change, includes: 1) individual factors, who focus along training and active along discussion session; 2) presenter's factors, who clearly explain about the topics, doing demonstration interactively, and facilitate discussion well; and 3) environment factors, where already set up to facilitate learning optimally. Provision of comfortable rooms, adequate audio-visual aid, varied method and media, good preparation, minimize distraction and optimize sensory function to reach understanding.

There were one health volunteers (number 28) who didn't increase in score. Before and after training keep gets 68 points, mean having enough knowledge. It can happen because of learning obstacles that can't be avoided, such as lack of focus in receiving materials and leave the room when the training done with a

specific purpose, so that the sensing process becomes less optimal.

This training gives chance for health volunteers to review and enhance their understanding about leprosy, rehabilitation for leprosy patients and former leprosy patients, eliminate leprosy related stigma, and also about education as an agent of change leprosy related stigma in the community. Health volunteers were the first line in managing health at the community. Along training, health volunteers also seen a demonstration about how the way to educate and promote community to eliminate leprosy related stigma. A training like this was beneficial to enhance health volunteers' role in eliminating leprosy related stigma. After training, health volunteers were given a task to educate ten people about leprosy, then report it to the person in charge of this program at Puskesmas Mulyorejo.

CONCLUSION

Training can enhance health volunteer's knowledge about leprosy. The enhancement of health volunteer's knowledge are expected to enhance their ability, willingness, and role as an agent of change leprosy stigmatization in their community. Training for health volunteers need a follow up such as providing media as a tool for them to promote the elimination of stigmatization on leprosy patients and former leprosy patients in their community. Beside that, supervision from community health nurses also needed.

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PERCEPTION AFFECTS THE HSP 70 FAMILY MEMBERS WHO CARE FOR SUFFERERS OF TUBERCULOSIS

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ABSTRACT

Introduction: Tuberculosis (TB) takes a long-time and family-involving treatment. The available program of family involvement is merely as medication-taking assistance. The family was not given the way to protect their self from contracting the disease. This paper explores the results of a research conducted to analyze the perception affects the heat shock protein (Hsp70) family members who took care for sufferers of tuberculosis. **Method:** this research was conducted using cross sectional approach. The sample was 20 respondents obtained through total sampling techniques. The independent variable was perception, while the dependent variable was the Hsp70. The data were collected by questionnaire for perception, and the Hsp70 was measured using blood sample. The data were then analyzed with t-test. **Results:** The average score of the respondents' perception was 64.15 and the average level of Hsp70 was 240.1 g/dl. The statistical T-test result showed $p < 0.05$, indicating that perception influences the Hsp70 level of the respondents. **Discussion:** The Hsp70 is very expressive to changes, whether physical or mental, including perception. Positive perception is needed to optimize the work of Hsp70 as the protector of cells in the immune system. The nurse must be able to establish a positive perception of the family members who care for tuberculosis patients. Perception can be given in the religious dimension is delivered through therapeutic communication.

Key words: Tuberculosis, perception, Hsp70

INTRODUCTION

Efforts to deal with and prevent transmission of the disease tuberculosis (TB) is still performed by the Government of Indonesia, primarily through the Department of health. Strategy for treatment of Tuberculosis DOTS have been applied in Indonesia since 1995 with the approach of advocacy, communication and social mobilization. Prevention of TB has been done through the program STOP TB. This program is to target people with TB sufferers and families. However, only family engaging in surveillance efforts are taking medication (PMO).

The family that took care of the sufferers have a higher risk of contracting TB.

Tuberculosis treatment in terms of treatment takes at least six months. Families caring for TB sufferers only given way to prevent transmission of TB physically, not mentally. Prevention of mentally is seen more effectively to stop the chain of transmission of TB, i.e. by increasing the positive perception. Family members caring for sufferers of TUBERCULOSIS sufferers are expected to take care with the patient and sincere so that positive perception formed. The perception of a positive impact on the gene expression protein in blood, namely, Hsp70. But until recently how perception influences the Hsp 70 family who take care of TB sufferers have yet to be explained.

The number of tuberculosis in Indonesia increased each year. The data shows an improvement of tuberculosis in Puskesmas Wonokromo every year. In 2011 as many as 42 people, 2012 as many as 46 people, as many as 47 people, the 2013 and 2014 as many as 52 people.

Tuberculosis treatment in terms of treatment takes at least six months. TB is also a disease that can be transmitted in droplets. It can be a stressor for sufferers and family members who care for sufferers. Sufferers must comply the treatment is running, and the families who care for sufferers should have patience and keihlasan for realizing a positive perception.

Nurses have a huge role so that the perception of families caring for sufferers of tuberculosis is becoming more positive. The perception of religious approach can be delivered through therapeutic communication techniques for nursing interacts with the sufferers and the families who care for TB. The nearest relatives are expected to improve perception, patient and sincere in caring for sufferers of tuberculosis, so that family members can manage stress so that is not easily contracted.

RESEARCH METHOD

Design research was the correlation with the approach of cross sectional. The population of this research was the whole family members caring for sufferers of tuberculosis in Puskesmas Wonokromo Surabaya, 14 people. This research sample obtained using total sampling, 14 respondents. The independent variable was the perception and the dependent was Hsp 70. The instruments in this study was a detailed questionnaire (for measuring perception) and blood samples (to measure the Hsp70). The data were analyzed using T-test. The research was carried out in week three of March 2012 at Puskesmas Wonokromo Surabaya. Researchers carry out research process after getting permission from the City Health Office in Surabaya.

RESULTS

Nearly half of respondents ages 21 – 35 years old (see figure 1), where almost all respondents have only finished their senior high school (figure 2).

Figure 1 the characteristics of the age of respondent

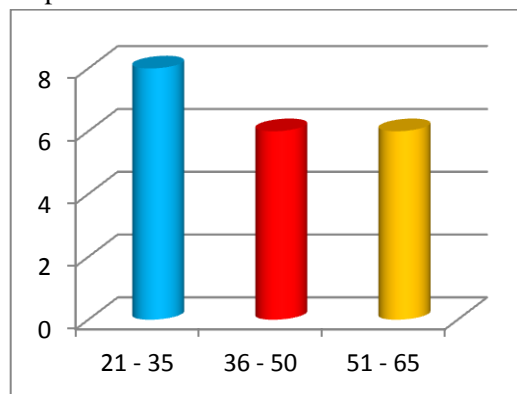
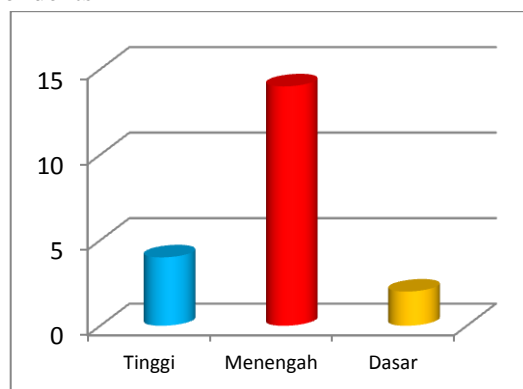


Figure 2 the characteristics of education respondents



Specific Data

Table 1 Data perceptions and Hsp 70

	Persepsi	Hsp 70
Mean	64,15	240,1
T Test	P<0,05	

DISCUSSION

Pareek (1996) in Sobur (2011) says the perception can be defined as the process of receiving, selecting, organizing, identify, test, and provide a reaction to pancaindra stimuli or data. Chrousos and Gold (1992) says that the condition of the body due to the good adaptation of positive or negative are known as biological perceptions. If the body is faced

with a stressor in persistent and body failed to maintain the balance of biological perception then that appears is the State of pathological or diseased (Putra, 2011).

The refinement of the concept of stress by Dabbar-McEwen stated that stress consists of stress perception and stress response. Stress perception is the result of a learning process to select, organize, and interpret the *mengintepretasi* stressor correctly. Stress perception in addition to engaging the intellect, the experience was also emotional. Based it so then the accuracy of these perceptions will create stress response be appropriate anyway. The concept of this stress in accordance with the concept of the psychology of the moment, stress *pesepsi* can be considered to reflect the change of cognition and stress response reflects the biological and physiological changes. Thus each individual received stressor will be studied carefully so that it produces the correct perception that would eventually responded correctly anyway (Putra, 2011).

Heat shock proteins are a class of proteins involved in protein folding. Hsp70 was instrumental in the prevention of necrosis in a cell and have the domain of N-and C-terminal that provides the relevant expression of the presence of antigens to the immune system. HSP function as molecular chaperon, which played an important role in protein folding, intracellular protein traffic, self-defense against denaturation of the protein due to heat stress and other (Asea, 2010). Extracellular Hsp70 was instrumental in protecting the cells.

Perceptions of respondents about the dimension of prevention of transmission of TB and the religious dimension is very varied. Lowest highest score of 50 and 70. Age and education factors appear to exert influence. The oldest age obtained the lowest score even though middle-level educated. But there are also the respondents with the oldest age obtained the highest score with a high level of education.

Perception is influenced by the background (education), experience, personality, belief and acceptance of self. External factors that affect the perception is the intensity, contrast, movement, Deuteronomy, familiarity, and something new (Sobur, 2003). Factors of self-acceptance is covered in the dimension of spirituality, therefore the approach used researchers not only cognitive but also in spiritual approach to improving self-acceptance of respondents.

The respondents should be patient in trying to accept and live the exams given by God, IE in the form of care for sufferers of TUBERCULOSIS. Respondents who are more patient and sincere exams (TB sufferer) and difficulties will be able to think much *megatasi* looking for solutions to problems or difficulties encountered. Ikhlas is a condition for the admissibility of a charity by God, either *batiniyah* or *lahiriyah* charity (Sa'adu, 2011).

A person's perception of perception can be changed, that is not good or negative regarding the prevention of transmission of TB disease knowledge and spiritual being good or positive perception. The goal of therapeutic communication is to change and improve the perception of the respondent's knowledge about the prevention of the transmission of TB disease and spirituality in the care of a sick member of the family TB. A more positive perception of the changes after a therapeutic communication also increases levels of Hsp70. This happens because the Hsp70 protein molecules is a small and very sensitive so it can quickly *terekspresi* to changes in the situation experienced by the body both physically and mentally. The increase in Hsp70 (within the normal range) will give a good influence for the respondent, that play a role in protecting cells, protecting the surface and into the cells.

SUMMARY

The perceptions of family members who care for TB sufferers, with an averaged 64.15, and the Hsp70 family members caring

for sufferers of tuberculosis is still in the normal range with an average 240.1.

Increased communication skills of nurses to improve the perception of the client. Dimensions religion to improve the perception of the sufferers and families need to be optimized

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PUBLIC PARTICIPATION IN HEALTH DEVELOPMENT PROGRAM IN WONOKROMO DISTRICT

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ABSTRACT

Introduction: Basic health development as stated in the Health development plan: (1) Humanitarian, (2) empowerment and self-reliance, (3) Fair and equitable, and (4) Promoting and benefits. Realizing the welfare of society (healthy society) required the Government's seriousness in its achievement. One of the aspects that must be met is public participation. Research issues is how is the form of public participation as the public independence and empowerment in Wonokromo district, Surabaya. This research is descriptive research, which aims to describe about this public participation form as the activity of public independence and empowerment in Wonokromo district, Surabaya. In determining informants used purposive technique with key informant technique (key informant). **Method:** The research strategy was an ethnographic research with the techniques of data collection in the form of observation, in-depth interviews, and the document data source. The data collected were analyzed using interpretive descriptive analysis techniques. **Result:** The results showed that this form of public participation were still top down. The system of Government in Wonokromo does not fully unearth potential and leverage activities society power sourced (UKBM). **Discussion:** With public active participation it is expected that it can increase public independence and empowerment by staying involved the active participation of health resources that are owned as a facilitator.

Key words: participation, independence and empowerment

INTRODUCTION

Development of standby village has started since 2006. Up to this time, it has been recorded 42295 villages and active standby sub districts (56.1%) of 75410 village and sub districts in Indonesia. Therefore, it needs to be implemented against the acceleration of standby Village Development Program is currently running, with the 2015 target of 80% will be achieved with the support of the various parties (Kemenkes RI. 2010).

Based on Health Ministry decree No. 564 Menkes/Menkes/SK/VIII/2006 dated August 2, 2006 about the guidelines of development of standby Village and vision health development, which is "Healthy Indonesia 2010" then in implementing health development, the Department of health should carefully pay attention to the basics of health development as stated in the Health development plan: (1) Humanitarian, (2) empowerment and Self-reliance, (3) Fair and equitable, and (4) Promoting and benefits.

Vision health development is supported through the primary health department strategies are 1) Moving and

empowering people to live a healthy life 2) Increase public access to quality health services against 3) Improving monitoring and surveillans systems, health information and health financing) increases 4. In an effort to facilitate the acceleration of the achievement degrees extended health for the entire population by developing preparedness at the level of the village called village of standby (Depkes RI, 2007).

Ensure the stability and sustainability of the development of the village and village standby undertaken gradually, having regard to the criteria or elements that must be met, namely:

1. The concern of the Government of the village or neighborhood and public leaders against the village or neighborhood standby that is reflected from the existence and activity of the village and neighborhood forums.
2. The existence of a cadre of public empowerment/health villages cadres on standby.

3. Ease of access basic health services towards the public which is open or providing services every day.
4. The existence of a UKBM can carry out (a) the disaster relief and emergency health care, (b) public-based surveillance software, (c) environmental health.
5. Reach (accommodate) the funding for the development of village and neighborhood standby in the development budget of the village or neighborhood and public and business world.
6. The active participation of the public and civic organizations in health activities in the village and neighborhood standby.
7. Regulation at the level of the village or sub district informing and set about the development of villages and sub district active standby.
8. The construction of clean and healthy living behaviours (PHBS) in households of the village or sub district. (Kemenkes RI. 2010)

Implementation of the strategy need to be supported by human resources (HR) competent, available in sufficient amounts, distributed fairly and evenly and is utilized to successfully and legally empowered to in order to the development of villages in standby. The public health Ministry responsible for Indonesia's Ministry of health is that according to Presidential Decree No. 15 of 1984 was indeed submitted task as organizer of some of the common tasks of governance and development in the field of health. For this, the Ministry of health, through all its officials that are scattered throughout the homeland, an active organizing the Ministry of public health. The apparatus in question is a regional Office of the Department of health found in every province as well as the offices of the Ministry of health, which is contained in every district (Azwar. 2010).

Furthermore in accordance with the principle of the necessity of involving the public in the field of potential public health as a whole is called with the name of the village public health development it be organizing in the shadow of the Institute of public health of the village. While the role of containers as well as the community in public health program known as the integrated service post. In the framework of the development of the role of the community, the Government has encouraged the formation of Poskesdes. One of

the Government's support is to provide social assistance Fund Operational Poskesdes. Leverage activities society power sourced (UKBM) who carry out the activities at least communicable disease epidemiological observations and potentially become an extraordinary occurrence (of the outbreak), risk factors for tackling infectious diseases and potentially become an of the outbreak, as well as malnutrition and disaster relief preparedness and health emergency basic medical services, in accordance with the competencies.

That problems arise in health care institutions are not appropriate between the needs of the task with the existing health workforce at each service unit, or existing energy piled on one unit while the others are not met or the existence of a health workforce that must be concurrently on other activities although not a duty or less in accordance with the educational background and expertise. Health workforce planners, acting as a driving force and simultaneously implementing health development so that without the availability of manpower in the amount, type and the appropriate capabilities, then the health development won't be able to run optimally.

Wonokromo subdistrict is one of the 31 districts in the city of Surabaya. Sub district Wonokromo has 6 neighborhood, which also runs the Government program in this program the neighborhood standby. In the implementation of the program, still found that public participation against government programs especially in the field of health or welfare of the community is still low, this is evidenced by the number of residents of the subdistrict of 159,964 Wonokromo thousand inhabitants (the results of registration of 2014) that also has a number of associations were the number two from the whole area of Surabaya, i.e. 504 clustering. But the results of the logging in January 2016 at sub district Sawunggaling, sub district Darmo and Jagir still found 80% of its citizens do not yet have a card on the territory of the village BPJS. The liveliness of the community on mutual activities felt very less, activities for save around are not coordinated properly, because of the existence of the security post. Still a high number, respiratory disease including Rhematik pain, and diarrhea. From the explanation above regarding the phenomenon of low public participation against government programs, especially in health programs, need

to be observed. It became one of the of researchers to look at the main public participation regarding the forms of public participation in health development program. Problems that would like to be answered in this research is how form of public participation in health development program in Wonokromo district.

RESEARCH METHODS

The design used study on the qualitative approach, carried out a deeper observation and meticulous against objects of research, so that the acquired data more accurate and fundamental. The population of this research covers all members of the public in Wonokromo district. As for samples of his work are the community members who play an active role in the program development in the Sawunggaling, Darmo and Jagir sub district. Sampling is based on the purposive sampling technique, i.e. by taking a subject, which is not based on the strata, random, location, however, is based on the specific purpose.

In addition to obtaining information from different types of sources, especially the master about the question of the community empowerment in the implementation of the program neighborhood standby and a wide range of relevant information, then the necessary informants who really know the issue in depth. The informants in this study include: the village head, village secretary, Chairman of the RT, RW, elders/community leaders, and members of the public who are directly involved in the management of program neighborhood standby. The main instrument in research utilizing qualitative methods are the researchers themselves. Researchers directly down to the field, doing observation into the field and interviews with the informant. Data collection techniques used in this research is by observation, interviews, and documentation. As for how data collection can be itemized as follows: (1) the observation, i.e. the way researchers to see and know the activity of residents in empowering the community in its region. (2) the interview, i.e. how the researcher to uncover how the subject give meaning against the activities of program neighborhood standby with empower villagers

in his area. (3) documentation, i.e. how the researchers to prepare and place terminology and theory of sources in this study i.e. the theory that concerns the public empowerment. Collected data through observations, interviews, and documentation is in the form of qualitative data. A technique used to analyze the research data is interpretive, descriptive analysis techniques with the following steps: (1) Select the document/data that are relevant and provide the code. (2) make the records of an objective, in this case at the same time do the classification and editing (reducing) the answers. (3) Create a reflective note, i.e., write down what is being thought of as a researcher to dispense with interpretation in an objective record. (4) the data by creating a format based on data analysis techniques researchers. (5) perform a triangulation that is checking the correctness of data by way of summing up the binary data retrieved through three ways: (1) extend the time of observation in the field with the aim to match the data that was written with the data field, (2) match the data that has been written by asking back to informants, and (3) match the data that has been written with references.

RESULT

From research conducted in Wonokromo district about forms of public participation in health development Program found that public participation in the form of energy, primarily provided by the fathers as in work activities or other activities such as the term waste management, not the maximum. Whereas such mutual interests founded the Poskamling, still not realized. Whereas the public participation in the BPJS, there are still many who have not joined in the membership of the BPJS, because participants felt the citizens still do not need. Another reason expressed, among others; feeling lazy to take care of because the process of dealing it took a long time, long queue up, and the process of dealing with difficult.

On the program neighborhood standby, public participation in planning, and implementation of already implemented properly, but public participation in the evaluation has not yet been implemented. The

public has given participation in the form of the fruit of the mind, it can be seen from the participation of the public to follow the forum neighborhood standby village cadres in particular. Participation provided i.e. willingness to ask when in standby until the neighborhood forum will to give suggestions and opinions, on condition that, the neighborhood meetings held in standby can build a conducive atmosphere. Meanwhile, still found obstacles in the implementation of health development program in Wonokromo district as there are shortage of health care personnel such as the lack of availability of motivators or power extension officers, moreover not yet support means a good infrastructure repair, level less self supporting and still the existence of limited funds to run the program neighborhood standby, the lack of monitoring and response of the public. On the other hand not only regarding the obstacles in the implementation of health development programme found researchers in the field, but the researchers also found a supportive factors such as the presence of the spirit and motivation that is still high, owned by cadre executive board neighborhood standby, the support of community leaders and law enforcement so that Wonokromo district with the support can be key to the successful implementation of health development program in Wonokromo district.

Minimum service standard includes four types of services: 1) basic medical services, 2) health services referral, 3) epidemiology and investigation countermeasures and genesis 4) health promotion and community empowerment (Kemenkes RI. 2010). It is the reference in the target achievement of program planning each area of district.

DISCUSSION

Embodiment health development programs with limited power then needed the participation of society. Public participation in program governance can enhance the independence required by the society in accelerating development. The public can participate in the stages of planning, implementation and evaluation of programs also development. Thus the society's view of change has occurred against participation. Now the public is no longer looked at participation as an opportunity given by the Government,

but rather appreciate the participation as a basic service and an integral part of local governance. Then, in this public participation means participation within the community development programme either in the process of planning, implementation or evaluation, in order to establish cooperation with other parties in supporting the program.

The primary responsibility in the program is the community development helpless or has power, strength or ability. The power in question can be seen from the physical and material aspects, economic, institutional, intellectual power and cooperation, shared commitment in applying the principles of empowerment. The ability powerless has the same meaning with the self-reliance of the community. Related to program development, that the objective to be achieved is to form individuals and society become independent. Independence includes independence of thinking, acting and control what they do. The society's independence is a condition experienced by a society that is marked with the ability to think, decide and do something that is right for the sake of achieving problem solving-problems encountered using power capabilities. That question is the ability of the power capabilities of the cognitive, psychomotor, affective and konatif as well as other resources physical/material. Community self-sufficiency can be achieved naturally require a learning process. The community that follows a good learning process, will gradually gain power, strength or abilities that are useful in the decision making process independently. Related to this, Sumodiningrat (2000) explains that the empowerment public that marked the existence of his independence could be achieved through a process of public empowerment. Usefully society can be realized through the active participation of the community is facilitated by the presence of the offender empowerment. Public empowerment is the main target of the weak and does not have the power, the strength or the ability to access productive resources or marginalized communities in development. The ultimate goal of public empowerment process is to be autonomous citizens in order to improve family life and optimize resources.

A democratic system of Government, the concept of public participation is one of the concepts that are important because it directly

related to the nature of democracy as a system of Government which focuses on people as the holder of sovereignty. According to Thomsen cited by Suriana in his thesis entitled ' the analysis of the sustainability of marine resources management cluster Kaledupa based public participation ' (Suriana, 2009) lays out the advantages of public participation are:

1. Expanding the knowledge base of participation and representation.
2. Participation help communication and transparency of harmonious relations of power between the stakeholders.
3. Participation can improve the iterative and cyclical creation raises approach and ensure that solutions based on local knowledge and understanding.
4. Participation will encourage local ownership, commitment and accountability. The involvement of local communities can help create the results (outcomes) are sustained by community ownership to the project success and ensure that the activities that lead to sustainability will continue to be ongoing. The result of the collaborative efforts are more likely to be accepted by all stakeholders.
5. Participation can build the capacity of communities and social capital. The participatory approach will increase the knowledge of each of the stakeholders about the activities/actions undertaken by other stakeholders.

Simply put the participation could be interpreted as the participation of a person, group, or society in the development process. The notion can be defined that a person, group, or public can make a contribution/donation if it can support the success of a project/programme development. In general public participation can be seen from this form of public participation provided in tangible form (it has existed) and also the forms of participation that is given in the form are not real (abstract). Real participation form such as money, property, effort and skill while the form of participation are not real fruit is participation of mind, social participation, decision making and representative participation. Public participation forms can be seen as follows (Huraerah, 2008):

1. Participation of the fruit of the mind, provided the participant in the meeting, meetings;

2. The participation of energy, given the participants in various activities for the improvement or construction of a village, help to others, and so on;
3. The participation of property, provided people in various activities for the improvement or construction of a village, help to others that are usually in the form of money, food and so on;
4. Participation skills and finesse, given people to encourage diverse forms of business and industry;
5. Social Participation, given to people as a sign of communality.

Suhendra (2006) states that of community empowerment is the awarding and distribution power to the community so that they are able to master or ruler over the life of its own in all aspects of life that includes political, economic, educational, health, environmental management, and so on. Based on this concept, in fact emphasizes empowerment efforts on how communities are helpless, able to develop usefull with capabilities, outsiders more as a catalyst that provides the spaciousness of the community to achieve the goal in question. Therefore, the meaning of community empowerment in essence give and distribute power so that the community is able to independently to rise up and overcome its weaknesses at both the individual and group level. Empowerment also includes strengthening the development activities so that in the rule they are able to play an active role as subjects of development. In order for community empowerment can take place effectively, then a state reform should take place at national or regional level. A variety of rules, conditions, institutional mechanisms, values and behaviors should be adjusted to allow the public to interact effectively with the Government. The ability of the community to increase its resources it shows that they are capable of independent and critical of their quick response when there is a program of activities that require handling or management with a thorough preparation.

CONCLUSION AND RECOMENDATION

Conclusion

Based on the discussion that had been outlined in conclusion, the research results prove that the public participation to health development in district of Wonokromo indicated in the form of participation that is

public participation in planning, while the participation of the public in the implementation, evaluation and monitoring is still not carried out properly. Society still depends on Government related, especially in the implementation of development programs especially in the field of health. Still found an inhibitor factor, among others, the reluctance of the community itself because health facilities adequately available, less self supporting level, lack of monitoring and response from the community itself.

Recomendation

Need for understanding and extracting the potential community deeply against the forms of participation that can improve independence and usefully community. This can be done if the support is expected to be in the form of moral support, financial support or support material, according to agreement and approval of the community. Should include agencies or container-a container of community activities in the field of health as Health Sub-district Council, PKK, as well as other civic organizations in each of the meetings and agreements.

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ANALYSIS OF THE CHANGE OF INTENT KEEP SKIN HYGIENE IN DORMITORIES AT AL-MUKMIN DAUGHTER ASROR BANGKALAN MADURA

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ABSTRACT

Introduction : Skin hygiene is the main cause of Scabies. The high incidence rate of Scabies is caused by the low skin hygiene. The skin hygiene in Pondok Pesantren Al-Asror is in the lowest rank among other personal hygiene. Therefore, this research was purposed to analyze the change in willingness to maintain skin hygiene resulted from health counseling held in female dormitory of Pondok Pesantren Al-Asror (Islamic Educational Center), located in Bangkalan, Madura. **Method** : The research was pre-experimental one group pre-post test design. The population involved all female students, totally 125 students, in which 96 respondents were chosen as the samples by using the simple random sampling technique. The data were collected by using questionnaires spread before and after giving health counseling in the location mentioned above, then analyzed by using T-test with the significance level of 0.05. **Result** : The result of analysis using T-test showed that $p = 0.000$ which meant that there was a significant change in the intention after receiving health education. So $p = < \alpha$ so that H_0 was rejected illustrating that there was a change in the intention to maintain the skin hygiene in the Islamic educational center. The research concluded that the health counseling can change the intention to maintain the skin hygiene. Hence, the students are expected to keep the skin hygiene to improve the health level.

Key words: intention, health counseling, skin hygiene

INTRODUCTION

Tropical climate in Indonesia is currently experiencing rainy season so plentiful standing water that can trigger the development of microorganisms that live in the water and various skin diseases. The cleanliness of the self is a form of personal hygiene in the cleanliness of the skin. Skin hygiene is very important because the skin is the body's first line of defense from disease-causing germs. When the skin is clean and well maintained, it will be able to avoid many diseases, disorders, or disorders that may appear (Chayatin & Mubarak, 2008).

According to the Director General of the Medical Services Department of health of the Republic of Indonesia year 2006 disease of the skin and subcutaneous tissue based on prevalence of disease on society most 10

Indonesia ranked second after acute respiratory tract infection with 501,280 number of cases or the brainguardmd.com 3.16%. The most common skin disorder in boarding schools is skabies. According to Kuspriyanto (2010) cited by Rifaq (2013) number incidence skabies in East Java in 2009 as many as 45 (10,37%) in 2010 as much as 79 (18.20%), and in 2011 that is as much as 80 (20,05%).

Based on the prevalence can be on cluded that the incidence of the disease, number skabies from year to year has increased. Skabies is one of the primary skin disease that occurs due to the cleanliness of the skin is less. The preliminary study has been done in the dorm's daughter Al-Mukmin Asror on 19 January 2014 as shown in table 1.1 below:

Hygiene	Trimester I		Trimester II		Trimester III	
	N	%	N	%	N	%
Skin	89	71,2	72	57,6	64	51,2
Nail	119	95,2	112	89,6	101	80,8
Hair	107	85,6	115	92	119	95,2
Teeth and mouth	104	83,2	115	92	121	96,8
Eye	121	96,8	118	94,4	109	87,2
the Perineum	116	92,8	119	95,2	123	98,4

Source: Daughter Boarder Al-Mukmin Asror 2014

Based on Table 1.1 obtained that the hygiene of the skin in the dorm's daughter Al-Mukmin Asror Bangkalan Madura less attention is evidenced by the lowest numbers compared to other self hygiene. Students of the Al-Mukmin daughter Asror often have skin diseases. The most frequent skin pain inflicted on students there is a water flea, as well as itching.

Most of the students say that the skin pain he suffered due to the foot of the pond is near a dirty bathroom and access to the room damp santri. They also said that he sometimes just bath 1 time a day due to lazy, and some students expressed because sometimes the water in the shower cabin.

In addition, the use of a towel interchangeably, the State of the dirty rooms can be the cause often contracted the skin disease.

According to Taylor's (1989) Chayatin & cited by Mubarak, (2008) stated that, the existence of problems in hygiene themselves would have an impact on one's health. When someone is sick, one cause is self hygiene is lacking, because cleanliness is an important factor in maintaining the health of the individual degrees.

Personal hygiene or cleanliness in this case cleanliness of the skin can be affected by several factors, namely cultural, socio-economic status, health status, knowledge, habits, and the willingness of individuals to perform personal hygiene (Potter & Perry, 2005). The willingness of the individual in question focused on the intention to maintain the cleanliness of the skin.

Based on the above issue, the solutions do researchers approach is through the theory of Planned Behavior in order to measure the change in the intention to maintain the cleanliness of the skin through public health.

RESEARCH METHOD

The type of research used was pre alphabets experiment with one-group pretest posttest design. The population in this study are all students in dormitories at Al-Mukmin Daughter Asror Bangkalan Madura as many as 125 people. Instrument research using questionnaires. Sampling done in simple random sampling is obtained as many as 96 respondents.

RESULT

The results of the special data contains the characteristics of respondents who include intentions before and after the given health counselling, a change of intention before and after, and the analysis of the changes of intention.

- Intention before and after the given health counselling and change the intention of students

Table 1.2 Intentions before and after the given health counselling and change the intention of boarding students at Al-Mukmin Daughter Asror Bangkalan Madura

	N	Mean Before	Mean After	Delta Mean
The intention	96	60.79	64.35	3.56

Source: Processed Data Researcher, March 2014

Based on Table 1.2 indicates that the intention of students to maintain the cleanliness of the skin before given health counselling acquired results mean 60.79, after given health counselling of 64.35, delta and the mean value of the results obtained by 3.56.

- results of the analysis of the Changes of intention due to the Extension of the health

Table 1.3 Analysis Changes the intention to maintain the cleanliness of the skin due to Health Counselling in the dorm's daughter Al-Mukmin Asror Bangkalan Madura March 2014

N	Variabel		ρ	Descriptio n
	Dependen	Independen		
96	health Outreach	intention	0,000	change

Sources: The primary Data 2014

Table 1.3 investigation obtained through Test T-Test shows results of significant value = 0.000 so there was significant value with changes in the amount of 0.000 which means there is a change in the intention to maintain the cleanliness of the skin due to health education in boarding schools Daughter Boarder Al Asror Bangkalan-Madura.

DISCUSSION

The intention is to change the change the desires of someone to do something. The greater a person's desire to change then the occurrence of a change of intention is getting bigger as well. According to the Theory of Planned Behavior intentions can be seen from the change in attitudes, subjective norms, and the perception of control behavior (Nursalam, 2013).

The first factor that affects the intention is attitude. Attitude is a response in the form of closed positive or negative feelings towards an object that followed the tendency to behave. The attitude can be affected by four factors, namely, experience, a physiological factor in terms of reference, and social communication.

The existence of information obtained through health counseling students, resulting in the knowledge the students can add up and the attitude of students to maintain the cleanliness of the skin. An increase in the value of the mean attitude after the extension of health, there are conformity with theory that States that information received of individuals will be able to cause a change in attitude on the

individual self (Walgito, 2001 in Sunaryo, 2004).

The second factor that affects a person's intention in behaving according to the Theory of Planned Behavior (TPB) is the subjective norm. Subjective norm is one's belief regarding the approval of others against an act that is affected by two factors, namely normative belief (individual belief that someone thought he should or should not be doing a behavior), and motivation to comply (individual motivation to meet the norms of that person).

Health counseling is awarding an information and beliefs on someone that others support the existence of such behaviour, and give an information about the importance of these behaviors when done. So, someone will be motivated to want to do the appropriate behavior is recommended. This is evident in the results of the study showed that the mean value of the delta positive.

The third factor that affects a person's intentions to behave according to TPB is the perception of control behaviors. Perception of control behavior (perceived behavioral control) is easy or hard it is against the perception of a behaviour can be implemented. Perceived Behavioral Control (PBC) is influenced by two factors, namely a control belief (or no factors that hinder or support such behaviour performance), and perceived power (the perception about how strong things that support and hinder his behavior) (Nursalam, 2013). Perception is the power to know the objects through a process of observing, knowing or interpret after sensory perception gets a stimulus. The perception itself is influenced by several factors, namely interests, interests, habits, and konstansi.

An increase in the value of the mean perception due to health counselling about the cleanliness of the skin can give a new knowledge to the students about the importance of hygiene of the skin, so that students will feel that hygiene is very important for skin health. The existence of the interest of the students against the perception of the cleanliness of the skin will change and

the desire to maintain the cleanliness of the skin. This is in accordance with the theory that States that the process of the formation of perception occurs through three mechanisms, namely: selectivity, closure, and interpretation. Selectivity process happens when someone on the other by information, then process the message is taking place is not considered important. Next in the process of closure, the result of the selection will be compiled into a single entity that is sequential, whereas interpretation occurs when a concerned provide interpretation against the information thoroughly. (Feige cit. Khayati, 2000 cited by Wuryaningsih, 2008).

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the goals and results that will be achieved in the process of this research it can be summed up as follows:

1. Students in dormitories at Al-Mukmin Daughter Asror Bangkalan Madura before given health counselling has a positive intention to maintain the cleanliness of the skin.
2. Students in the dorm's daughter Al-Mukmin Asror Bangkalan Madura before given health counselling has a positive intention to maintain the cleanliness of the skin.
3. There is a positive intention changes to maintain the cleanliness of the skin due to health education dormitories Princess Al-Mukmin Asror Bangkalan Madura.

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THE INFLUENCE OF MOZART CLASSICAL MUSIC THERAPY ON THE LEARNING ABILITY AMONG STUDENTS IN GRADE XII SOCIAL CLASS AT SMAN 1 PAGAK MALANG

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ABSTRACT

Introduction: The effective learning process can be achieved when internal and external influencing factors are minimized. The internal factors include self motivation, talent, and learning interest, while the external factors include learning environment, social and friendship relationship, supporting factors (i.e. facilities), and the learned materials. The purpose of this paper is to disseminate a study conducted to explore the influence of Mozart classical music therapy on the learning ability of students at SMAN Pagak, Malang. **Method:** This study was a pre-experimental, using one group pre-post test design. The sample was 22 students that were taken using purposively. The independent variable was Mozart classical music therapy, and the dependent variable was the learning effectiveness of students. The data was collected using formative test. The data was then analyzed using wilcoxon signed rank test with the significance level of $p < 0.05$. **Results:** The test results of the study that the value of significance level was $p = 0.000$, **Discussion:** Mozart classical music therapy is effective in improving the learning ability of students. Mozart classical music therapy can be applied as one way to increase the learning ability of students, because Mozart classical music therapy can create calm and relaxed effect.

Key words: classical music therapy, learning ability

EFFECT KIB (KELAS IBU BALITA) AGED 0-59 MONTHS OF PRACTICAL USE OF BUKU KIA IN MEGALUH AND JOGOLOYO PRIMARY HEALTH CARE IN JOMBANG CITY

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ABSTRACT

Introduction: Mothers and children are most vulnerable to various health problems that lead to death. Buku KIA (Kesehatan Ibu dan Anak) is a tool for recording and monitoring of maternal and child health. Utilization of Buku KIA is one of the priority programs in Indonesia. This study aims to analyze about effect KIB aged 0-59 months of practical use of buku kia in megaluh and jogoloyo primary health care in jombang city. **Method:** This quantitative study used cross sectional approach. Using cluster random sampling technique with a sample size of each region of a number of 75 respondents involved from Megaluh and Jogoloyo Primary Health Care. The primary data obtained directly from mothers through questionnaires and observations include how knowledge utilization Buku KIA. While secondary data in this research is data of mothers who have a buku KIA and mothers who attend classes. Data were analyzed using Chi Square test different because in this study only look at the differences between the groups there KIB and groups that no KIB. **Result:** Results of this study indicate that there is a class effect of mothers 0-59 months for utilization behavior maternal and child healthbook by statistical analysis Chi-square test $p < (\alpha) 0.05$.so that influence of the mother and children against practices in use Buku KIA in Megaluh and Jogoloyo Primary Health Care, In Jombang City. The analysis results show that there are differences in the utilization of knowledge between the Buku KIA in Megaluh and Jogoloyo KIB with classes that do not implement mothers.

Key words : Buku KIA, child health, mother practice

ANALYSIS FACTORS AFFECTING DIPHTHERIA EPIDEMIC IN BANGKALAN MADURA

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ABSTRACT

Introduction: Diphtheria is a disease caused by *Corynebacterium diphtheriae*. In 2012 this disease became epidemic in several regions of East Java, including Bangkalan, Situbondo, Jombang and Surabaya. **Method:** This study was an applied research using secondary data drawn from Puskesmas Bangkalan in 2013. **Results:** The results showed that the human resources versus the target number PIN ($p = 0.048$) and immunization coverage have a relationship with the incidence of diphtheria in Bangkalan ($p = 0.041$). **Discussion:** High immunization coverage is expected to reduce the incidence of the disease are immunized. The full immunization coverage have a significant influence on the case of diphtheria. The results of this study are expected in improving health promotion in order to reduce cases of diphtheria in East Java

Key word : diphtheria, epidemic

INTRODUCTION

Diphtheria is a health problem both worldwide and in Indonesia itself. Diphtheria is an acute disease caused by the bacteria *Corynebacterium diphtheriae*. The disease was first described by Hippocrates at -5 th century BC, and then only in the 6th century AD Aetius tells of diphtheria epidemic. In 1883, the germs of diphtheria Klebs researching on pseudomembranous and bred by Loeffler in 1884. At the end of the 19th century, the experts found diphtheria antitoxin, while the new toxoid was developed in the 1920s. Diphtheria is an endemic disease in many countries in the world. In the early 1980s an increased incidence of diphtheria cases in State ex-soviet union because chaos immunization program, and in the 1990s is still going great epidemics in Russia and Ukraine. In the 2000s epidemic of diphtheria still occur and spread to neighboring countries.

In Europe, diphtheria immunization program began in 1940. and since the incidence of diphtheria immunization program is quite low. Since then, only two epidemics have occurred, the first in 1982 - 1985 and the

second that began in 1990. The epidemic is primarily affected republics in the former Soviet Union, in particular Russia and Ukraine (Program Perluasan Immunization in 1993). More than 95% of cases are now reported in the European Region of Russia and Ukraine.

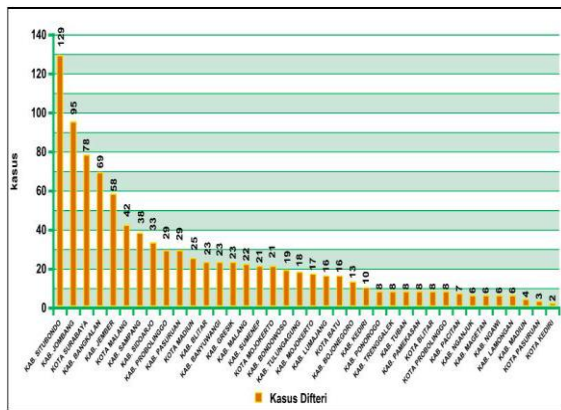
In Indonesia, in 2011 the world health Indonesia struck by the spread of diphtheria in the province of East Java (East Java). A total of 11 333 children died of diphtheria cases that arise during the year 2011. Therefore, the government of East Java Province set KLB (Unusual) diphtheria in East Java in October 2011. Determination of the status of outbreaks is done considering the case has spread in almost all regencies / cities East Java.

Diphtheria is a case of "re-emerging disease" in East Java because of diphtheria cases actually declined in 1985, but increased again in 2005 during an Extraordinary Events (KLB) in Bangkalan. Since then, the spread of diphtheria increasingly widespread and reached its peak in 2012 of 955 cases with 37 deaths and are scattered in 38 districts / cities. Diphtheria cases in East Java is the largest contributor to the case in Indonesia (which

amounted to 74%) even in the world (East Java Health Office, 2013)

Diphtheria cases in East Java has plagued 34 cities / districts. In 2012 diphtheria cases was highest in Situbondo (129 cases), Jombang (95 cases), and Surabaya (78 cases). While the lowest cases Kediri (2 cases), Pasuruan (3 cases) and Madison County (4 cases). As figure 1.1

Figure 1.1 The case of diphtheria in East Java



Transmission of diphtheria has been increasing since 2005. In 2010, in the East Java region is high morbidity as many as 304 cases of diphtheria in 32 areas and resulted in 21 children died. Whereas in 2009, there were 140 cases in 24 regions in East Java with the victim eight people died. East Java Province for two years from 2012 to June 2013 declared Extraordinary Events Diphtheria with the number of cases as many as 1,264, the case was with the details of the year 2012 as many as 954 cases with the death of 37 people, the year 2013 until the month of June as many as 310 cases with the deaths of 15 people (East Java Health Office, 2013).

Based on data from the Health Office Bangkalan, terdpat 76 people stricken with diphtheria in 2013. This deadly disease occurred in 14 districts and only four districts that are not reported any incidence of diphtheria. In 2012, the number of people stricken with diphtheria Bangkalan that as many as 69 people, and of these six people died.

Efforts are being made to suppress a case of diphtheria is to do the basic immunization in infants with vaccines Diphtheria-Pertussis-Tetanus and Hepatitis B (DPT-HB). The vaccine is given three (3) times that at the age of 2 months, 3 months and 4 months. Moreover, due to the surge of cases in school age children the additional immunization Tetanus Diphtheria (TD) is also given to primary school children and equal grades 4-6 and high school (SMP) (East Java Health Office,2013)

RESEARCH METHOD

This type of research used in this study is an applied research is research that is used to apply and develop science in which the theory is applied in the field of health statistics. The location of this research is in the province of Bangkalan Madura and research time from May to June 2014. The data used in this study is data from the Health Office Bangkalan 2012. This data is the data of Extraordinary Events diphtheria. The variables in this study consisted of the dependent variable and independent variables. The dependent variable is the Diphtheria outbreak. The independent variable is the density of occupancy, direct contact, Human Resources (HR), distance between regions and Immunization Coverage.

RESULT

Number of Cases

Distribution of the District according to the number of cases in the District can be viewed through the following table

Table 1 Average Number of Cases Difetri by the District in 2013

Subdistrict	Case Number	Percentage (%)
Tanjung Bumi	24	16.55
Sepuluh	3	2.07
Klampis	21	14.48
Kokop	1	0.69
Arosbaya	8	5.52
Geger	6	4.14
Bangkalan	17	11.72
Burneh	8	5.52
Konang	0	0

Tanah Merah	9	6.21
Galis	8	5.52
Socah	6	4.14
Tragah	2	1.38
Blega	1	0.69
Kamal	2	1.38
Labang	6	4.14
Kwanyar	11	7.59
Modung	12	8.28
Total	145	100

Source: Secondary Data DHO Bangkalan Year 2013

Table 1 shows that in Bangkalan, the average number of cases of diphtheria most was the district of Tanjung Bumi is 24 cases (16.55%) and the lowest number of cases of diphtheria is the District Subdistrict Kokop and Blega namely 1 case (0.69%).

Residential Density

Distribution of districts according to population density in Bangkalan can be viewed through the following table

Table 2 The average density of occupancy by the District in 2013

Subdistrict	Density Residential
Tanjung Bumi	732.65
Sepuluh	539.73
Klampus	742.40
Kokop	507.34
Arosbaya	963.91
Geger	517.90
Bangkalan	2,229.43
Burneh	857.97
Konang	564.43
Tanah Merah	859.80
Galis	627.20
Socah	1,004.93
Tragah	682.37
Blega	583.38
Kamal	1,126.52
Labang	970.38
Kwanyar	894.40
Modung	584.31

Total	14989
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Source: Secondary Data DHO Bangkalan Year 2013

Table 2 shows that in Bangkalan, the average occupancy density sufficient qualified District of Bangkalan is 2229.43 and less qualified occupancy density is the District Kokop ie 507.34.

Direct contact

Distribution of districts according to the number of direct contacts in Bangkalan can be viewed through the following table:

Tabel 3. Average Number of Contacts Direct by the District

Subdistrict	Direct of Contact
Tanjung Bumi	7.3
Sepuluh	9.6
Klampus	15
Kokop	3.48
Arosbaya	5.75
Geger	9
Bangkalan	11.33
Burneh	9.8
Konang	4.36
Tanah Merah	12
Galis	11
Socah	11.6
Tragah	2.99
Blega	23
Kamal	6
Labang	9.25
Kwanyar	13
Modung	8.6
Total	173.06

Source: Secondary Data DHO Bangkalan Year 2013

Table 3 shows that in Bangkalan, the average number is the most direct contact the District Blega with 23 contacts and the lowest was Trega namely the District 3 contacts.

Human Resources According to People (The Comparison of Human Resources by Total Goals)

Distribution Comparison of the District according to Human Resources by Total Goals in Bangkalan can be viewed through the following table.

Table 4 The average HR by the District

Subdistrict	HR according to target
Tanjung Bumi	568.66
Sepuluh	705.09
Klampus	853.47
Kokop	1416.17
Arosbaya	495.61
Geger	1455.32
Bangkalan	992.58
Burneh	763.96
Konang	1358.42
Tanah Merah	1080.11
Galis	1283.15
Socah	692.35
Tragah	758.07
Blega	1149.89
Kamal	813.88
Labang	990.90
Kwanyar	968.41
Modung	856.36
Total	17202.40

Source: Secondary Data DHO Bangkalan Year 2013

Table 4 shows that in Bangkalan, areas of high average human resources (HR) is the District Geger is 1455.32 and the average area of human resources (HR) Low is the District Arosbaya ie 495.61.

Distance of Territory

Distribution Sub-district according to population density in the district can be seen through the following table:

Table 5 Average Spacing Region Based on the District

Subdistrict	Distance of Territory
Tanjung Bumi	61
Sepuluh	50
Klampus	42
Kokop	66
Arosbaya	35
Geger	43
Bangkalan	21
Burneh	18
Konang	36
Tanah Merah	0
Galis	10
Socah	29
Tragah	13
Blega	21
Kamal	39
Labang	18
Kwanyar	10
Modung	31
Total	543

Subdistrict	Immunization Coverage
Tanjung Bumi	95.08
Sepuluh	96.51
Klampus	96.60
Kokop	101.44
Arosbaya	101.10
Geger	89.79
Bangkalan	96.68

Source: Secondary Data DHO Bangkalan Year 2013

Table 5 shows the farthest distance from Tanah Merah districts are districts Kokop 66 KM and cement the closest distance from Tanah Merah districts are Galis and Kwanyar 10 KM.

Immunization Coverage

Distribution Sub-district according to population density in the district can be seen through the following table:

Table 6. Average Immunization Coverage Based on the District

Subdistrict	Immunization Coverage
Tanjung Bumi	95.08
Sepuluh	96.51
Klampus	96.60
Kokop	101.44
Arosbaya	101.10
Geger	89.79
Bangkalan	96.68

Burneh	97.50
Konang	90.88
Tanah Merah	85.63
Galis	95.33
Socah	101.87
Tragah	115.35
Blega	98.36
Kamal	110.77
Labang	103.51
Kwanyar	92.41
Modung	93.38
Total	1762.18

Source: Secondary Data DHO Bangkalan Year 2013

Table 6 shows that the highest immunization coverage at the health center were Tragah that is equal to 115.35% and then amounted to 110.8% Kamal health centers, health centers Labang 103.508%, 101.44% Kokop health centers, and health centers Arusbaya of 101.095%. While the lowest immunization coverage at the health center Tanah Merah which amounted to 85.6298%.

DISCUSSION

Density Residential

From the analysis p value $0.128 > \alpha 0:05$ this means there is no relation between the extraordinary event diphtheria with residential density in Bangkalan.

Density residential home also affect health due to potentially spread the disease agent be easily transmitted from one human to another human. The density of occupants in the house also affect the breeding of germs in the room. Residential density in the home, is one factor that can increase the incidence of diphtheria.

But in the data analysis, no association between residential density with dfteri disease events in general this is due to good occupancy density in the group of children and adults in Bangkalan is good enough. Variations to the increased cases of diphtheria, causing outbreaks of diphtheria allegedly due to other factors.

In general appraisal occupant density by using the provisions of minimum standards, the occupant density that meets the health requirements derived from the quotient between the area of the floor with the number of inhabitants $> 10 \text{ m}^2 / \text{person}$ and occupant density does not meet health requirements when the obtained quotient between the area of the floor with the number of occupants $< 10 \text{ m}^2 / \text{person}$ (Lopez, 1989).

Direct of Contact

The results of multiple linear regression analysis obtained by value p-value of 0.625 ($p < 0.05$), which means that there is no influence between the number of direct contacts with the outbreak of diphtheria in Bangkalan.

The main source of human infection is diphtheria. Transmission occurs through the respiratory air when direct contact with patients or carriers (carrier) germs. Someone with diphtheria can transmit the disease since the first sick day to 4 weeks or until no longer found in the lesions of existing bacteria. A carrier (carrier) can transmit disease germs to 6 months (Cahyono, 2010).

Based on the results of data analysis and the theory of the variable direct contact influential only in the group of children alone but not the adult group caused by the immune system to target children more vulnerable than the adult group, so as to the occurrence of diphtheria directly to children more easily than people adult.

Comparison between the HR and the target

The comparison between the amount of human resources to provide faksinasi with the target number also the risk of the spread or transmission of diphtheria in Bangkalan district, meaning that the less the ratio between the SDM with the target number will further reduce the risk of contracting or spreading the disease.

Based on the results obtained by linear regression analysis p-value of 0.048 ($p < 0.05$) means that there is a significant relationship

between the number of HR with diphtheria outbreak in Bangkalan.

According to Sonny Sumarsono (2003), Human Resources or the human resources contains two meanings. First, is the work effort or service that can be provided in the production process. In other respects the human reflect the quality of the effort given by a person in a certain time to produce goods and services. The second notion, HR involves the human who is able to work to provide the services or work effort. Ability to work means being able to engage in activities that have economic activities, namely that these activities generate goods or services to meet the needs of the public.

Human Resources (HR) became the main factor of success running an organization. Then how the resources that need to be developed so that organizational goals can be achieved with good. In this case the SDM is a health worker spearheading an immunization services. sometimes the number of health and immunization disproportionate number of participants so that in one day a health worker holds a lot of goals. It would be ineffective ratio between 1 health worker does not balanced. The other problem is the problem of distance and transport lines are hard to reach so do not allow health workers to visit the place. For regions where low immunization coverage must be held sweeping immunization. For immunization workers, need to increase activity in counseling about immunization to the community, especially to do parents in meeting the needs of children about health.

The distance between Territory

In Bangkalan first discovered diphtheria is in the district of Tanah Merah then to the district Labang. From the available data, the distance between district Tanah Merah and Labang 18 KM. while judging from the number of cases is subdistrict Cape Earth 24 cases, the distance between the Tanah Merah district of Tanjung Bumi is 61 KM. and the second most cases is the District Klampis with

21 cases, the distance between Tanah Merah to the District Klampis is 42 KM.

While the closest distance from the district of Tanah Merah District of Galis and District Kwanyar with a distance of 10 KM while the two districts the number of 8 cases and 11 cases.

In this case far or near distance between the area has nothing to do because of the first discovered in the district of Tanah Merah with 9 cases, it was the highest cases are sub-district of Tanjung Bumi with the distance between the regions is 61 KM.

From the results of linear regression analysis processing child cases the distance between regions have influence with the incidence of diphtheria p value $0.299 > 0.05$ means that there is no effect of distance between regions with the incidence of diphtheria.

Immunization Coverage

Based on the results of a linear regression analysis on the scope of acquired immune p -value of 0.041 ($p > 0.05$) means no statistical effect on the incidence of diphtheria. In theory, high immunization coverage is expected to reduce the incidence of the disease are immunized. The full immunization coverage have a significant influence on the case of diphtheria.

DPT immunization schedule is very full and proper effect on the incidence of Diphtheria, with DPT complete and correct to form immunity (artificial active immunization). Completeness is not enough to protect the immune system from infection *Corynebacterium diphtheriae*, but also must be balanced with the immunization schedule accuracy. Research has been done a significant association between the incidence of diphtheria immunization status. Status DPT and DT incomplete provide opportunities for diphtheria.

CONCLUSION

Bangkalan District is the first district of infection of diphtheria which later became

Extraordinary Events (KLB) in eastern Java. In 2012 when the Province of East Java to Bangkalan Diphtheria outbreak incident became the order of 4 with most patients after Situbondo, Jombang and Surabaya. Data taken a secondary data drawn from District Health Office Bangkalan. From the results, the results were significantly affected Diphtheria outbreak in Bangkalan Regency is a target value of Human Resources and Immunization Coverage PIN.

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TUBERCULOSIS PATIENT HABITUAL OF COUGHING AND SPUTUM DISPOSE

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ABSTRACT

Introduction: Tuberculosis contagious was can be directly to healthy person when confronted by talking, coughing, and droplet. This condition was depend on tuberculosis patient, especially about sputum dispose. The study purpose was describe of the tuberculosis patient habits of sputum dispose. **Methods:** Design study was cross sectional. Subject were 111 tuberculosis patients, who recorded in register at public health center of Kota and Kabupaten Blitar in January – April 2015. Subject criteria were not multi drug resistant and not being hospitalized when data collection. Variables study were patient characteristic, habits when coughing, and sputum disposal habits. Data collection used questionnaires, conducted in May – August 2015. Analysis used descriptive and correlation. **Result:** This study showed that patient habits when coughing are very bad, that are the cough position is straight forward, do not shut mouth, using the hand to close, and no hand washing after coughing. And, patient habit of sputum dispose has correlated with used closer container, used disinfectant in container, and how to dispose of sputum accumulated. **Analysis:** The patient coughing habits was not good and dangerous for those who live around. Because the bacteria that fell together with droplet will be easy to breed and can get into the lungs via the inhaled air. In case the transmission of tuberculosis will be fast. So, patient efforts to collected sputum given disinfectant should be maintained, but will be changing used the soap as disinfectant into formaldehyde. Example formaldehyde which is easily available and often used is softener and perfuming clothes. **Discuss:** Health education for tuberculosis patients need to be improved abaout good way of hands wash to prevent contagious and use of formaldehyde to kill germs.

Key words: tuberculosis, habit, sputum dispose, health education

THE EFFECT OF PEER GROUP DISCUSSION TO IMPROVE ADOLESCENT'S KNOWLEDGE AND ATTITUDE ABOUT FREE SEX PREVENTION ON 8th GRADE STUDENT'S AT SMP PANCA JAYA SURABAYA

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ABSTRACT

Introduction: Adolescence is a stage of transition from children to adulthood. Lack of knowledge about free sex prevention can increase free sex behavior in the future among adolescence. This study was aimed to analyze the effect of peer group discussion to improve adolescent's knowledge and attitude about free sex prevention on 8th grade student's at SMP Panca Jaya Surabaya. **Method:** This study was used quasy experimental design. Population were all of adolescence 8th grade and through multistage random method derived A 8th grade and D 8th grade as affordable population. 50 respondent involved, taken according to purposive sampling, divided into 27 respondent on experiment group and 23 respondent on control group. The independent variable of this research was peer group discussion and dependent variable were knowledge and attitude. Data were collected by questionnaires and analyze using Wilcoxon Signed Rank Test and Mann Whitney U Test with significant level $\alpha < 0,05$. **Result:** Wilcoxon signed rank test showed that peer group discussion had effect on adolescent's knowledge ($p = 0,022$) but not on attitude ($p = 0,157$). Mann Whitney U Test showed there was difference result between experiment group and control group on knowledge ($p = 0,022$) but the result is not significant on attitude ($p = 0,424$). **Conclusion:** It can be concluded that peer group discussion can be used as a method of health education in providing information about free sex prevention in adolescence especially to increase their knowledge. Nurses should do preventive action to decrease free sex cases in adolescence.

Key word: Peer group discussion, adolescence, free sex prevention behavior

MACRO COSMOS EFFECT ON HUMAN HEALTH BEHAVIOR AND CULTURAL PERSPECTIVE BY JAVA (BEHAVIOR STUDY OF JAVA SOCIETY IN TAKING CARE OF AND IMPROVING HEALTH IN BLITAR EAST JAVA)

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ABSTRACT

Introduction: Health is a right of a very basic need for every human being. To achieve optimal health conditions required curative and preventive promotive rehabilitatif by every human being, This can be done by identifying the macro cosmos environmental influences on behavior and human health in addition to micro cosmos itself. In Javanese culture macro cosmos is believed to contain elements and substances associated with behavior and human health. Java community have views and ideas acquired by generations of the ancestors for the handling of health problems. The purpose of this study is to explore the macro cosmos influence on behavior and human health from the perspective of Javanese culture and behavior of the community in maintaining and improving the health of a growing and developing in the community. **Method:** This study uses qualitative diskriptip. The place of research in the district and the town of Blitar using Indepth interviews with informants, Focus Group Discussion with informants in accordance with the view of knowledge and ideas of society as well as direct observation in the field. **Results:** Results of the study found that the effect on behavior and macro cosmos human health according to informants whose background is Javanese culture Human behavior is influenced by the 7 (seven) elements, namely natural Bramono Nature, Pandito Nature, Ratu Nature, Brojo Nature, Prabowo Joyo Nature, Condro Wahono Nature, Watonggo Nature. Derived from the Sun / Fire, Water, Earth, Wind, Star, Moon, Space which has a different nature and character, have different sources and substances, all of which can affect human health. **Discussion:** For government health programs in maintaining and improving public health need to pay attention to macro cosmos influence on behavior and human health. Further studies on the source of the substance on human health.

Key words: influence of macro cosmos, behavior, health

FOSTERING SOFT SKILLS IN NURSING THROUGH CARING THEORY IN NURSING ETHICS COURSE

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ABSTRACT

Introduction: Nursing education is the foundational process to build nursing student to be excellent in their future competency. Fostering soft skills in nursing support students' competence to improve the quality of caring to patient in health care area. Soft Skills Framework identifies basic or foundational skills for workplace success to promote incremental grow in nursing profession. Nursing is a form of professional service that is based on nursing knowledge. Soft skills in Nursing are an interpersonal relationship process and an interaction between nurse and patient in social environment during nursing care given. The characteristic professional nursing is nurse's caring, when if it is done properly based on the standards, it can improve the quality of nursing services. **Method:** The study was conducted to explore the component of nursing ethical values to fostering soft skills in nursing students. **Result:** Nursing ethics should teach the contain such as the human dignity, privacy, autonomy in decision making, responsibility, collaboration, and accuracy in caring, commitment, human relationship, sympathy, honesty, and individual and professional competency. **Discussion:** *Soft skills in education and health care practice* promote quality in health care services including autonomy, justice, veracity, confidentiality, good communication, respect patients and families. So that, learning ethics for health providers is important for nursing students to be professional because they promote quality care and change the innovation caring through interpersonal performance in the workplace.

Key words: soft skill in nursing, caring theory, nursing ethics

AN ANALYSIS OF LEARNING ENGLISH FOR SPESIFIC PURPOSES (ESP) FOR NURSING USING VIDEO MEDIA TO INCREASE THE STUDENTS' SPEAKING ABILITY

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ABSTRACT

Introduction: General English is different with English for Specific Purposes; it is more difficult than general. So, it has a complicated problem such as how to read and speak correctly. English is an international language that is very important to understand in easier of us to give communication to face the world wide society. In globalization era, we have to speak English in all different situations because much information such as book, literature, journal and other used in English. In the fact students feel worry to speak in English. **Method:** it used qualitative research which conducted in classroom after the teaching and learning process. Techniques of data collecting are observation, interview, questionnaire, and documentation. Based on the findings, the researcher found any significant improvement of the students' speaking ability after using the video media. After following the learning and teaching process, the students start comprehending the importance of English in their future job. **Result:** the result of learning outcome that there is significant improvement of students' speaking achievement in speaking English.

Keywords: English for specific Purposes, Nursing, video media, speaking.

INTRODUCTION

The success of teaching and learning activity stands or falls by the educators' ability to create a classroom climate that is conducive to active participative learning by the learners (Jacobs et al.2001:2) he also said the following conditions for participative learning: each learners should express him/ herself freely, expression of one's view should not be met with destructive criticism, the idea that for every question which exist one answer should be discarded, and learning by inquiry balances reception learning.

English is an international language that is very important to understand in easier of us to give communication to face the world wide society. In globalization era, we have to speak English in all different situations because much information such as book, literature, journal and other used in English. The educator has a new method that already applied in the classroom to increase the students' speaking motivation using video media. Therefore, researcher interests to analyze the learning English for specific purposes using video media to increase the nursing students' speaking ability.

RESEARCH METHOD

This research used both qualitative and quantitative research methods to obtain the data for analysis stage. Qualitative research was the dominant research method and quantitative research was used only to reduce the data obtained using questionnaires and interviews. It used qualitative approach which is taken in the classroom as learning process happen. According to (Arikunto: 2010: 38) "qualitative approach is a research procedure that produce a descriptive data with form of written or oral from the people were being observed". The researcher used this approach to find out the comprehensive data of students in the 3rd semester Pemkab Jombang health school of science to the learning English achievement especially speaking. The expected result of this research is to build the confidence and motivation in improving the English speaking skill. Qualitative data makes it possible to exploe which events led to which consequences and to derive at explanation.. In this case, I as researcher and educator was one of the subjects of the study. It also refers to the variety of techniques. The insider's view in qualitative research is able to observe event

while they are occurring. While observing the events, the researcher becomes part of the natural setting. The seven weeks provided opportunity for continual data collection, observation of the participants in their natural settings (classroom)

To enhance the validity of qualitative research, researcher make an extensive data use triangulation. Denzin (in Babbie & mouton, 2001:275) defines the triangulation as follows:

Triangulation or the use of multiple methods is a plan of action that will raise sociologist above the general biases that stem from the single methodologies. By combining the different data collecting methods and different investigators in same study. Observers can partially overcome the deficiencies that flows from one investigator or method.

RESEARCH DESIGN

This research is used classroom action research as a research design. This research conducted because the researcher as a lecturer also found the phenomena of lower quality in learning English especially in speaking. She used 2 cycles to face the problems. This research is conducted on September 2015 when the process of teaching and learning in the 3rd semester academic year 2015/2016. The sample is all the students in the classroom total 30 students, while the object of research is all of the object in this research.

McNiff: 2010 said that “*Action research is a form of enquiry that enables practitioners in every job and walk of life to investigate and evaluate their work*”. Classroom action research is a research that used by the educator to educate using better method and material, learning technique and learning materials visionary. Babbie and mouton (2001:277) explains that there are three types of qualitative research design i.e ethnographic study, case study, and action research. The emphasis of qualitative research is on human action in their natural setting. The action of people who involved in this research was described in detail and the researcher explored data to understand the actions of students in improving their speaking skill. She sees action research as means for bridging the gap both theory and practice. As defined by Kemmis and McTaggart (1988) action research consists of four phases that take place in 2

cycles. These four phases are planning, acting, observing and reflecting.

Planning – the researcher as an educator plans to make an interactive technique and plan before she goes to action. She plans the interactive material, media and technique. It also needs the time management when using this video media technique.

Acting – it is the time for researcher to doing the activity that already planned it. Lecture explains the way to introduce a nurse to the patient and how to construct the good dialogues between nurse and patient when a nurse asked the problem (case study). After knowing the form of introduction, she prepares the media (video media) to show the dialogue between patient and nurse.

Observing – the students simultaneously with the action. After showing the video media, lecture asked the students to practice with the peers using good collaboration. Lecture can know the situation in the classroom and from the body language of them.

Reflecting – the researcher reflects upon what is happening in their research, developing revised action plans based upon what they learned from the process of planning, acting and observing.

The qualitative research methodology used a data collected through interviews, observational technique, and questionnaires needed to be described and summarized. This study made limited uses of quantitative research in collected the data questionnaires. By quantifying the data collected through questionnaires, the data was reduced. It become more manageable and easy to present using graphs and tables.

To gathering the data use different research instrument such as: interviews, to know the opinion about the use of video media to increase the quality of students in speaking skill. It use open-ended questions is to provide the opportunity of both researcher (interviewer) and students (interviewee) to cover all the topics more detail and depth.

Observation is the best instrument to gain the real picture of the activity of students in the way to improve their speaking skill using discussion, debate and make a dialogue with the video media technique. According to freebody(2003:82) describe the observation means participating in the action of people in the research setting in their ways of doing.

Questionnaires are easy to analyze and reduce bias. The questions were divided into three aspects, they are:

- The first questionnaire deal with the educator’s teaching style with the classical ways
- The second was the learners understanding about speaking skill using video media
- The last was asking about the impact of video media in increasing their speaking skill

The last instrument was field notes, a problem have to record during observations and overall activity. The field notes can be written after any incident took place. It added more value in observation as the researchers’ record her own observation. During this activity, she could also record the body language, facial expression, and right pronunciation used by the learners.

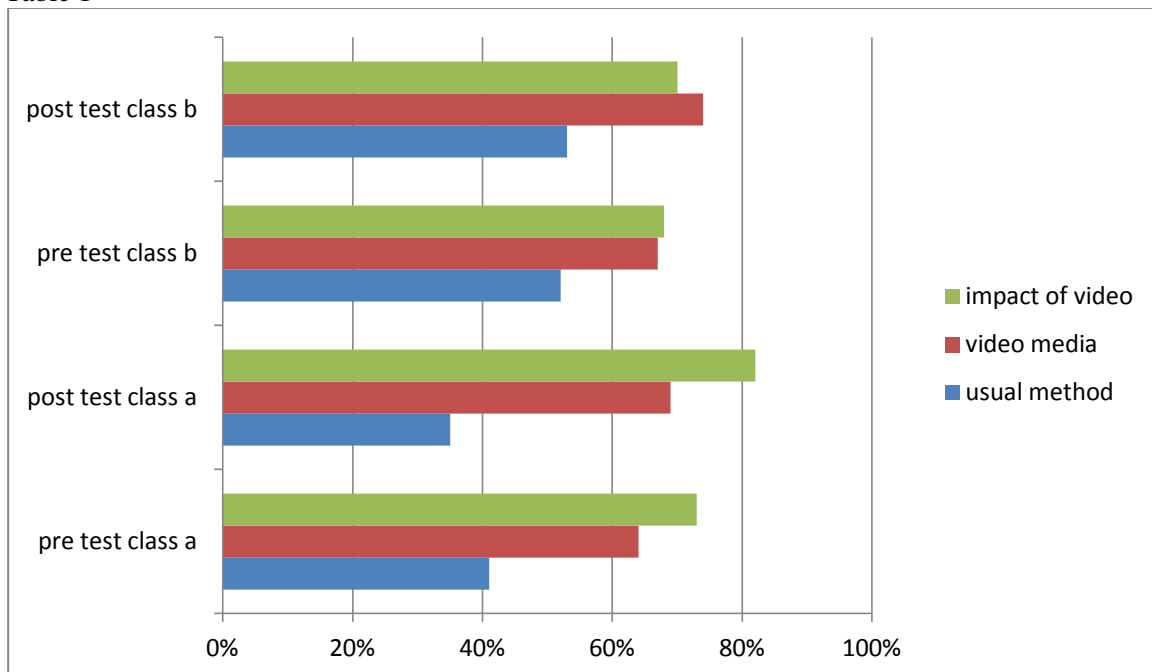
RESULT AND DISCUSSION

Data analysis is the process of searching and arranging the interview transcript, questionnaires, and field notes that

accumulate to increase of data understanding. Two structured questionnaires were design to gain the information from learners. The first questionnaire aimed to know the effectiveness of two methods in teaching speaking skill, first is classical method using slide show power point and the second used video media. Researcher wants to know the different method in teaching speaking skill that encourages students become more active in the classroom. This completed questionnaire can be used as pre-evaluation. The next questionnaires just focused on the implementation of video media as a technique to increase students’ interest to speak English. It was conducted at the of the research project (after seven weeks lecturing). 50 learners participated in this research project. They were involved in grade 2 in 3rd semester, this can be termed post-evaluation observation test.

The questions of the questionnaire were completed and the only “yes” answers were displayed in the graph. The pre-evaluation responses were compared with the post-evaluation response.

Table 1



The graph presents the overall result in terms of different cycles. The respondents “yes” answer were put in the graph. The results showed that there was a significant improvement from learners in learning speaking using video media.

The interview gained to know the effectiveness of the method in their teaching and learning process. Researcher took two students in the interview process, which they all agree with the use of video media as a teaching method to enhance the speaking skill.

Penggunaan video membuat saya lebih paham dengan berbicara bahasa Inggris dengan pengucapan yang tepat, apalagi langsung dipraktikkan untuk berdialog (Maulana Dimas, 2016).

The using video media to become easier in improving my speaking skill with the right pronunciation, otherwise it directly practiced it in dialogue (Maulana, 2016)

In the other case, some students feel confused to understand the speaking of the speaker's said. To anticipate it, researcher gives the difficult vocabularies before turn on the video.

CONCLUSION AND RECOMMENDATION

Conclusion

After analyze the implementation of video media to increase the students' interest in learning speaking, the researcher conclude that using video media is a new method in teaching speaking with the aim to enhance the students' ability in speaking English. The methods which can create to motivate the students in speaking are debate, group discussion, role play, and video media. Video is a good alternative after the students mastering the vocabularies and the pronunciation in speaking English. It can be seen from the students' questionnaire, interview and observation. It has a good result in using the video media as a new method.

Recommendation

Teaching speaking is not easy because of English is not the first language in our country, but it is foreign language. Especially

in nursing department, it can help the students to make good interaction between a nurse and patients. The nurse should be ready to face the globalization era, in which they must be able to speak English well. To support the students, a lecture should have a creative method in teaching and learning process especially in speaking English as foreign language.

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THE RELATION BETWEEN THE TEACHER'S ROLES IN TEACHING ENGLISH FOR SPECIFIC PURPOSES TO THE THREE DIFFERENT DEGREES OF NURSING PROGRAM STUDENTS' MOTIVATION OF APPLYING ENGLISH IN NURSING TERMS

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ABSTRACT

Introduction: Nursing as a familiar job within public health in this nowadays time builds the consideration of mastering English brings advanced concept in order to reach better education and career in globalization era and the mindset changes of English language education. Related to that phenomenon, English for Specific Purposes (ESP) teacher should also notice that in teaching ESP they have to play their roles to help students in the teaching and learning process which can influence the students' motivation, later on, in applying the English in the nursing terms. This literatures' review is aimed to know the relation between the teacher's roles in teaching ESP to the three degrees of nursing program students' motivation of applying English in nursing terms. **Methods:** The literatures are found by using the database for the related references which focuses primarily on understanding in depth the teacher's roles in the teaching and learning process of ESP to nursing program students and the relation to the motivation of the nursing program students in applying the English in nursing terms. **Results:** All the literatures which are taken for this study found that the kinds of roles played by ESP teacher are as the lecturer, clinical or practical teacher, role model, facilitator, mentor, assessor, curriculum assessor, resource developer, and study guide producer. Besides, it is also found that the nursing programs students in different degrees can have the same motivation in applying the English in their own nursing terms' level of degrees. **Discussion:** Several roles played by the ESP teacher in the teaching and learning process can have the relation to the students' motivation in applying the English in nursing terms whether for the different level of degrees in the nursing program. In reality they are often interconnected and closely related one to another. The teacher's roles in the teaching and learning process of ESP to nursing program students can be used by teachers as the development of their roles in teaching and learning process. Indeed a teacher may take on simultaneously several roles, however, a professional ESP teacher (in this case: nursing) should be aware of their important roles, deal, and develop those roles within themselves as those will affect and give positive influence to the students' motivation in applying English in nursing terms even in the different level of degrees of the nursing programs.

Key words: Teacher's Roles, Teaching English for Specific Purpose (ESP), Nursing Students' Motivation, Different Degree, Applying English in Nursing Terms

INTRODUCTION

Nursing, a familiar job within public health, recognize that globalization era brings some challenges for the learners not only for having integrated and professional skills but also for developing the communication skills to support the giving quality of services. In nursing program, teaching of ESP will go in line with the concept stated by Robinson (1991) in Dudley (1998) that as with most disciplines in human activity, ESP was a

phenomenon grown out of a number of converging trends of which we will mention three most important parts as the expansion of demand for English to suit specific needs of a profession; the developments in the field of linguistics (attention shifted from defining formal language features to discovering the ways in which language is used in real communication); and educational psychology (learner's needs and interests have an influence on their motivation and effectiveness of their

learning). Role is determined as actor's part; one's function, what person or thing is appointed or expected to do. That is the definition given by the Concise Oxford Dictionary (1982) in Beltrán 2001, but in our daily lives we fulfill roles that have features of all these defining characteristics. Some roles may be thrust upon us by circumstances (e.g. school pupil); on the other hand, we choose for ourselves many of the roles we fulfill (e.g. teacher). According to the literature (Mayer & Marland, 1997 in Allahyar and Nazari, 2012), it is understood that based on the knowledge of students, teachers shape an image of their class, set goals accordingly, and adjust their reactions to individual students based on their perception of students' needs and their situation. Therefore, ESP teaching presumes teaching of English as a foreign language regarding specific profession, subject or purpose.

Integrated teaching, problem-based learning, community-based learning, core curricula with electives or options and more systematic curriculum planning have been advocated. While the increasing emphasis on student autonomy in medical education has moved the centre of gravity away from the teacher and closer to the student, the teacher continues to have a key role in student learning. A good teacher can be defined as a teacher who helps the student to learn. Beltran (2001) stated that the teacher has eleven roles which considered as the importance roles should be done in the teaching and learning process for medical students. They are as the lecturer, clinical or practical teacher, role model, facilitator, mentor, assessor, curriculum assessor, resource developer, and study guide producer. Besides, related literatures considering the factors influencing the motivation of the students to learn and apply what they have already learned in the classroom are commonly influenced by the roles of the teacher itself. It is also found that the nursing programs students in different degrees can have the same motivation in applying the English in their own nursing terms' level of degrees.

This literatures' review is aimed to know the relation between the teacher's roles in teaching ESP to the three degrees of nursing program students' motivation of applying English in nursing terms.

METHOD

The literatures are found by using the database for the related references which focuses primarily on understanding in depth the teacher's roles in the teaching and learning process of ESP to nursing program students and the relation to the motivation of the nursing program students in applying the English in nursing terms.

LITERATURE REVIEW

All the references in this literature review is mostly having the similar concepts and perspectives. The point of view related to the consideration of mastering English nowadays brings advanced concept for each person in order to reach better education, employment, and career enhancement, particularly in this era of globalization. It has brought the mindset changes of English language education. Besides, the matching of language and content also broadens to gain specific knowledge to improve the skill working. The needs to understand the requirements of other professions and willingness to adapt to these requirements make the different term to the roles of the foreign language teachers for specific purposes. Considering those phenomena, the English for Specific Purposes (ESP) teacher should also notice the important aspects in teaching English for specific purposes so that they can play their roles to help the students in the teaching and learning process optimally. Nursing, a familiar job within public health, recognize that globalization era brings some challenges for the learners not only for having integrated and professional skills but also for developing the communication skills to support the giving quality of services. In nursing program, teaching of ESP will go in line with the concept stated by Robinson (1991) in Dudley (1998) that as with most disciplines in human activity, ESP was a phenomenon grown out of a number of converging trends of which we will mention three most important parts as the expansion of demand for English to suit specific needs of a profession; the developments in the field of linguistics (attention shifted from defining formal language features to discovering the ways in which language is used in real communication); and educational psychology (learner's needs and interests have an influence

on their motivation and effectiveness of their learning).

The Teacher's Roles in Teaching English for Specific Purposes in Nursing Program Students

There was a time when the traditional approach of teaching was adopted by most of the teachers, where the learners used to be dependent only on the lecture delivered by the teacher. But as the education system changed with time so has the teaching methods. Education system now demands more of student interaction rather than just listening to the instructor. Hence, classroom interaction is very essential in today's education system (Mullen, 2010). Role is determined as actor's part; one's function, what person or thing is appointed or expected to do. That is the definition given by the Concise Oxford Dictionary (1982) in Beltrán 2001, but in our daily lives we fulfill roles that have features of all these defining characteristics. Some roles may be thrust upon us by circumstances (e.g. school pupil); on the other hand, we choose for ourselves many of the roles we fulfill (e.g. teacher). teachers have two major functions in the classroom to create the conditions under which learning can take place: the social side of teaching; to impart, by a variety of means, knowledge to their learners: the task-oriented side of teaching. Besides, some contextual factors such as classroom management issues, large number of students, and limited teaching resources contributed to the teacher's perceptions and practices as well. According to the literature (Mayer & Marland, 1997 in Allahyar and Nazari, 2012), it is understood that based on the knowledge of students, teachers shape an image of their class, set goals accordingly, and adjust their reactions to individual students based on their perception of students' needs and their situation. Medical education has seen major changes over the past decade. Integrated teaching, problem-based learning, community-based learning, core curricula with electives or options and more systematic curriculum planning have been advocated. While the increasing emphasis on student autonomy in medical education has moved the centre of gravity away from the teacher and closer to the student, the teacher continues to have a key role in student learning. The kinds of roles played by ESP teacher are as the lecturer, clinical or practical teacher, role model, facilitator, mentor,

assessor, curriculum assessor, resource developer, and study guide producer (Beltrian, 2001). A good teacher can be defined as a teacher who helps the student to learn. He or she contributes to this in a number of ways, which are seen from the roles played.

The Motivation of Applying English in Nursing Terms

The development of the students' needs and situation bring lots of changes to those roles also. Here then the development of the teacher's roles and how the classroom interaction between teachers and students should be gained and considered more. Defining classroom interaction can be as a two-way process between the participants in the learning process (Pang, 2002). The teacher influences the learners and vice versa. Interaction can proceed harmoniously or it can be fraught with tension. How the situation actually develops depends on the attitudes and intentions of the people involved, and on their interpretations of each other's attitudes and intentions. An appreciation of these factors is essential if we are to understand teaching activities. Although, the social and psychological factors inherent in the roles are hidden, the process of learning a language in the classroom is underpinned by the teacher/learner relationship. Some factors influence the role relations between teachers and learners (Beltran, 2001), one related of them is the motivation. When the teacher of ESP is playing their several roles (particularly) in medical majors, things which should be consider also is how the students are able to implement the concept into the daily routines. English as the subject of teaching ESP to the nursing program students should bring the benefit to the students in order to be applied in the nursing terms. To reach this purpose needs the high motivation provided by the teacher's roles played in the teaching and learning process.

THE IMPLICATION TO THE PRACTICE

Some references taken for this literatures' review shows that professional ESP teachers should be aware of their importance roles, deal and, develop those roles within themselves. The teachers' being for the student in the teaching and learning process should provide main purpose of teaching skills is to enable students to fit the goal of the teaching and learning process. The teacher as a leader in

the process will affect and give influence to the student's motivation through some roles they play in the class. Besides, the teacher's roles will help student with their expectation, satisfaction, and achievement. Those needs will be transformed into daily behavior or response for their learning process.

By understanding and having comprehensibility of those basic important roles, the teacher could develop and deal with the need of ESP, especially in nursing program student, even its is applied in the three different level of degrees. Considering framework of teaching ESP in the classroom context, the teacher of ESP, who knows the subject better than the students do, develop the essential skills in understanding, using, and/or presenting information in their profession (Mullen, 2010). Therefore, the teacher's roles are measurable and researchable to be point of the study and have the close relation to the aspect of motivation in students (here is for the nursing programs) in order to gain the stimulation to apply English in the nursing terms in purpose. Having different level of degrees in the common nursing program nowadays will not be counted as the obstacles to apply he English major in the nursing terms. Indeed the motivation to implement the subject of learning is stated related to the needs of using it to fulfill the public demands of education standards based on the curricula while in the future to the working fields.

CONCLUSION

In order to understand in depth the teacher's roles in the teaching and learning process of ESP to nursing program student, several literatures taken show that the concept of teacher's roles in teaching have the relation towards the motivation of the students to apply what they have learned. Correspondingly, for the development of the teaching, the teaching process should pay more attention to the roles of teacher played in the classroom as the more roles played in the teaching process; the positive results would be for the students. The learning process in the classroom is also a main part of the success in this case. Therefore, learning process should also pay more attention to the students' response towards the teacher's roles done in the classroom (Brown, 2008). One of the factors can be seen from the motivation. It is due to the students' response

toward the teacher's roles in teaching ESP will be very influencing to the teaching and learning process held. The more positive the students' motivation towards their teacher's roles played, the better the learning process for themselves and also for the teacher in teaching. Furthermore, the students (in this case is the nursing program) would apply the English in their nursing terms as they have high motivation from the teaching and learning process given by the teachers when they are doing several roles properly related to the specific purposes even it is all done in the different level of degree for the nursing program students.

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THE CONVENTIONAL MODEL AND PROBLEM BASED LEARNING MODEL TO MOTIVATE LEARNING IN MIDWIVERY STUDENT AT PEMKAB JOMBANG INSTITUTE OF HEALTH SCIENCE

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ABSTRACT

Introduction: UNESCO proclaimed the importance of the capacity of life long learning. Learning motivation is one of the very important role in this regard. However, all students have not high motivation. It is influenced by the learning model applied by lecturers during learning. The purpose of this study was to analyze the comparison between conventional learning model and Problem Based Learning (PBL) to learning motivation in midwery student. **Methods:** This study used a quasi-experimental methods. Samples used cluster sampling technique, 90 respondent. The data collection technique for learning motivation used a questionnaire and independent t-test design. **Results:** There are significant comparison between conventional learning models and PBL to motivate learning with p-value = .001 with t value 17.117, df = 45. **Discussion:** In designing learning, institution should use a learning model that can increase learning motivation so that students active in their learning and can improve the soft skills of students in lifelong learning capabilities.

Keyword : Problem Based Learning, Konvensional, Learning motivation.

INTRODUCING

The UNESCO Education Strategy said that the entire education system is designed to facilitate lifelong and 'lifewide' learning creation of formal, non formal and informal learning opportunities for people of all ages. The concept of lifelong learning requires a paradigm shift away from ideas of teaching and training towards those of learning, from knowledge-conveying instruction to learning for personal development and from the acquisition os special skills to broader discovery and the releasing and harnessing of creative potential. This shift is needed at all levels of education and types of provision, whether formal, non formal or informal. (Unesco, 2010). To support this education must apply the model of learning that can improve student learning motivation. Learning motivation is an important component in supporting of long life learning (Gasperz, 2011). In the Indonesia, the quality of education is still low. There are many gaps between the patterns of education and graduates who are expected in the community. One of the gaps is that graduates only

understand the theory, while the expected graduates who have the ability solutions to problems based on scientific concepts.

Kesuma (2010) said that many institution are not qualified of learning. Students are often disappointing of understanding of lesson. Many students received teaching material , but in reality they do not understand. Many teachers focused only on the lower of critical thinking, remembering and memorizing and not equip of high-level thinking skills. Teacher tends to send memorizing, learn concepts in the abstract, and without going through the process of understanding. The student intend to receive knowledge and do not construct their own knowledge.

John Dewey (1916) in Yamin (2011) states that the school is a laboratory for students to investigate and coping of everyday life in the real world. Therefore, students need to be involved in a variety of problem-oriented projects and help them investigate a variety of issues important social and intellectual. Dewey found in the learning process learners should be given freedom of speech, learners should be

active and not just accept the information given by the teacher.

From the above problems, improvement of the quality of the midwife should start from education. The one of the learning models used by teachers, because learning model is a set of planned way by teachers so that students can achieve learning objectives that have been set. The learning model used by teachers in the learning process will give great significance in producing quality graduates. It is believed that learning approach Student Centered Learning can improve the quality of students, because this approach requires learners to be active in learning. Problem Based Learning is a learning model that is student centered learning, and it is said that this model is the right model digunakan in health education. Problem Based Learning born in 1950 and originally intended for medical education (medical). It aims to help students learn to become active learners because they are expected to respond to the real problems that exist in the world in their learning process (Hmelo, 2004). Therefore, this model is a good model of learning for health workers, in principle PBL had the idea that learning can be achieved if the educational activities focused on tasks or problems that authentic, relevant, and presented in a context. As expressed by Yamin (2011), that PBL prepares students for a lot of thinking in solving problems in real world life. PBL is designed to achieve goals such as improving skills and intellectual inquiry, thus helping students to have independent learning skills.

How are aimed at making the students have experience as they face the future professional life. The experience is very important, as stated in the learning model Kolb (1976), emphasizing that learning will be effective when initiated with a concrete experience. Questions, experiences, formulation and drafting of the problems that they created themselves is the basis for learning.

De Jong et al in Ormrod (2009), revealed that learners remember and transferred information more effectively when they construct themselves rather than just reading and listening. With the PBL, students will learn not just memorize, but it can analyze a problem and find an alternative solution. In lessons, learners should be encouraged to

develop patterns of thought. So learning does not require students to memorize, but to understand what is taught and understood why he had to learn the art. Errors in designing a study would be bad for people who are learning, if midwifery students learn by rote without understanding the science is taught, this will have an impact in the future, as long as the learning process is not accustomed to analyzing and finding creative solutions, then this will affect the quality as a midwife, because the role of the midwife in the real level should be able to analyze in order to determine a diagnosis, and should be able to plan alternative solutions to problems related to diagnosis patients, this clearly needs brains accustomed to critical thinking and analysis, and it dimuali of education period midwife.

Problem Based Learning approach, invites students to more closely on the issues to be studied and the benefits of science, to know the benefits of such knowledge, it is expected to increase the motivation of learners. Because motivation is one of the factors that determine the success of a learning process. As expressed by Asmani (2011), that in learning, motivation can be considered as the overall driving force within the students who lead, ensure continuity, and provide direction and learning activities, so it is expected goals can be achieved. While the success of the learning process can be monitored through the achievement of learners.

The approach in PBL learning model is the thought process that high, therefore the necessary motivation to learn from learners to be able to solve problems / cases displayed. By using real-world problems as a context for students to learn about critical thinking and problem solving skills, as well as to acquire essential knowledge of the subject matter. It is hoped this can increase the motivation of learners to learn and further motivation is embedded in the mindset of learners that are basically in the real world in which they will devote the science of the future, will find a lot of problems requiring settlement by way of precise, logical and demands the ability higher-level thinking. Presumably, PBL models that can be used in midwifery education is in compliance with government rules about the educational curriculum, as stipulated in the National Education number 20 of 2003 Chapter II, Article 2 explains that the National Education based on Pancasila and the

Constitution of 1945. In the third article mentioned national education serves to develop the ability and character development and civilization of the nation's dignity in the context of the intellectual life of the nation, is aimed at developing students' potentials in order to become a man of faith and fear of God Almighty, noble, healthy, knowledgeable, skilled, creative, independent and become citizens who demokratif and responsible. The research objective is to analyze the differences between conventional learning model with the Problem Based Learning in improving midwifery students' learning motivation.

METHODS

This research was conducted in the midwifery Diploma Program Pemkab Jombang Intitute of Health Science at Academic Year 2012/2013 in October to February 2013. Study

Design is a quasi-experimental research. The sample is the students of the Diploma program of Midwifery Level 2sd on the student class A (given the conventional model) and class B (given the model Problem Based Learning), Samplingused cluster sampling and prior to the second study class equality has been tested using independent t-test. Data collection techniques in this study using a test to measure learning outcomes, whereas to measure the motivation to use a questionnaire with motivation categories ARCS (Attention, Relevance, Confidence, Satisfaction). Measuring instrument has been tested the validity and reliability. The analysis used in this study is the independent t-test, which saw the difference between learning motivation of students given Conventional Learning and Problem Based Learning.

RESULTS

Table 1.1 : Test of statistic the comparation between conventional model and PBL to motivae learning

		Levene's Test for Equality of Variances		t-test for Equality of Means						
				95% Confidence Interval of the Difference						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MOTIV	Equal	3.049	.084	-3.331	88	.001	-.33333	.10006	-.53217	-.13449
ASI	variances assumed									
	Equal			-3.331	87.604	.001	-.33333	.10006	-.53219	-.13448
	variances not assumed									

DISCUSSION

Problem Based Learning Model have better results because basically PBL is requires students to be actively involved as a main character in a learning process. With PBL, students are trained to face the problem and find ways to solve it by using the relevant source. As expressed by Ibrahim and Nur in Rusman 2011 which said that PBL is an approach to learning that is used for higher-level thinking processes of students in situations oriented to the real world, including learning how to learn. Facts obtained from this study in accordance with that expressed by Silver (2004) that PBL helps students become active learners as learn to solve problems in the real world.

In learning to use the Problem Bssed Learning, students are the main actors in the

learning process, then the activity will determine the success of student achievement of learning objectives. Learning will be meaningful, said Mayer (2008) when learners are truly involved in the use of reason throughout the process to gather some relevant information, organize them into a coherent structure and mentally integrate with all the parts included with the knowledge that has been controlled taken or pulled from long-term memory.

Explanation of Mayer (2008) shows that the PBL students can play an active role to find the relevant information that they can use as an alternative to solving the problem, in addition to the wealth of information and easily search for information, the student must have good skills in selecting information, so information used completely accountable.

Arends (2008) in his book *Learning to Teach* explain that PBL find the root of the intellectual in the work of John Dewey, in his book *Democracy and Education* (1916), Dewey describes the views on education with the school as a mirror of society at large and the class will be a laboratory for investigation of real-life problems. Dewey encourages teachers to engage students in a variety of problem-oriented projects and help them investigate a variety of issues important social and intellectual.

The theory presented Dewey shows that basically school is a laboratory reality to be faced in the future, then the learning is used in schools should look at the problems that occur in the real world, because students will learn to understand the realities that have occurred since they are in school, so that whenever they have to face a real problem in the future, they are able to conduct an investigation of information for problem resolution. Besides, by PBL students can be trained to soft skills, as they should be able to express opinions without imposing, able to appreciate differences of opinion with other people and be able to think of analysis to select the information that is accountable, and educate not easy to despair in completing problems. As expressed by Duch (2001) in his book *The Power of Problem Based Learning* explained that the ability to use what you have in your work? That problem-solving ability, interpersonal skills, writing skills and management capabilities that scored 60% higher than the capability of knowledge. Therefore, it would be menjewab PBL challenges that exist today, where students not only learn passively but actively demanded to be expected that eventually the students have good ability on soft skills and hard skills.

Basically, motivation is a very important element in a process of learning, because with their own motivation be the impetus for learners to achieve the learning objectives. As revealed by Ormrod (2008) in his book *Psychology of Education*, that motivation is something that turn on (energize), directing and maintaining behavior, motivation to keep students engaged, puts them in a certain direction and keep them moving. Ormrod explanation shows that motivation is very important in learning.

This fact in accordance with the opinion of Cox (1999) that in the class using

conventional learning model, students passively accept the lesson, modeled replicate what teachers and follow the direction of teachers or textbooks. Similarly, Kellough cited Yamin (2011) says that in a class that uses a model of conventional, teachers authoritarian curriculum centered, focused, formal, informative and dictator, which resulted in a teacher-centered classroom situation.

An interesting fact is that the student group was given conventional learning models have a number of students with low motivation more than highly motivated, ie 62.2% for yng students have low motivation, this is because the conventional learning is the learning that is both teacher centered learning, where the teacher as the main actor in the learning process, this leads to students being passive and just accept what is presented by the teacher. Unlike the PBL learning model, students who have high motivation more than on having a low motivation, students who have low motivation is only 28.8%. This is understandable because PBL is an instructional model that is student centered learning. In a student centered learning students are conditioned to be active in learning, the design of which was designed by the teacher requires students to be actively involved in the concept of PBL, students are given a problem that is relevant to the real problems, and students are required to use their ability to find a solution to the problem, this is what causes the motivation of student learning in PBL group higher than conventional ones. Because in finding the answer to every problem needs a higher thought process and the ability to continue to look for alternative answers. Demands for finding alternative better answer seems to increase student motivation to learn.

At a given PBL student groups and has a high learning motivation, obtained an average score of 81, while a group of students were given conventional learning models with a high motivation to learn has obtained an average score of 78. If the views of a group of students who have low motivation, score the average in the group given PBL sebsar 58, while those given conventional learning models for 53. from this fact shows that it is basically a given PBL group students better than conventional ones, whatever its motivation category, either high or low

motivation, which PBL has given better learning outcomes.

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INTERNAL ANALYSIS OF SELF REGULATED LEARNING: DEVELOPMENTAL STUDY

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ABSTRACT

Introduction: The new students must adapt to the learning process if they enter to the universities. Self regulated learning (SRL) is a concept of adaption and act of judging oneself to get goal setting, organizing metacognition, time management, strategy of learning, self-evaluation, self-confidence, self-efficacy and physical and social environment settings. The purpose of study was to analyze the internal factors SRL of forethrough, performance and self reflection phase at Pemkab Jombang Institute of Health Science. **Methods:** The design was developmental study. Population of 71 nursing students 4th semester of academic year 2012-2013. The sample used 60 students with simple random sampling. Data were collected by questionnaire, and analyzed using regression results smartPLS 2.0. **Results:** The results showed that the correlation between forethrough and performance phase of 0.976, the correlation between performance and self reflection phase of 0.374, the correlation between forethrough and self reflection phase of 0.576. **Discussion:** SRL Model systematically shaped by internal factors of forethrough, performance and self reflection phase. SRL Model should be recommended to all of the learning process and can especially be on learning in nursing students.

Key words: Self Regulated Learning, Forethrough Phase, Performance Phase, Self Reflection Phase.

INTRODUCTION

Nursing students must to adapt in the learning process. Nursing students are expected to be more independent and professional nurse. Self regulated learning (SRL) is a concept of adaption and act of judging oneself to reach goal setting, metacognition, time management, learning strategy, self-evaluation, self-confidence, self-efficacy, and physical and social environment settings.

However, in the fact there are still many students have difficulty in learning process and have no effective way of learning. Based on preliminary studies, 57% of students less prepared of setting goal, 65% of students do not decide in goal strategy and less analysis of evaluating one's goal progress and adjusting strategies to have success. In addition, 54% of students still have the low motivation to get learning process. Aquiring self regulatory competence is an developmental task and enhance human functioning accross the life span (Nasrin, 2012). Study Program of Bachelor Nursing at Pemkab Jombang Institute of Health Science has been no development of the students learning behavior so that the necessary development of the model approach SRL. However, the formation of character and

competence achievement in student learning approach SRL could not be explained.

According to (Pribadi, 2009) mentions that the motivation in the learning process is important. Students who experienced academic difficulties were more likely to have problems of achievement, therefore it is less ready to learn and avoid it. Many studies illustrate the importance of SRL. It is succeeded of learning effectively and efficiently. It will be obtained at a higher level of satisfaction (Desyanti, 2007). The formed characters of and softskill are another effect which have the motivation for life long learning. Based on background above, this study aimed to prove analyze the internal factors of the SRL model in nursing students.

METHODS

This study is a developmental study. The final result of this design was to determine the causal relationship among internal factors of SRL. They are forethrough, the performance and self reflection phase. The population were all students of Nursing Bachelor program in the 4th semester level II Pemkab Jombang institute of Health Science, they were 71 students. The sample size were 60 respondents with simple random sampling technique.

Research conducted at March 13th to April 25th, 2013. The instrument's internal factors of SRL is a questionnaire created based on the concept SRL by Zimmerman (2002). Measurement variable internal factors of SRL

using model test with 2.0 smartPLS is a path analysis of structural equation model analysis techniques (Structural Equation Modeling-SEM).

RESULTS

Table 1.1 Forethought phase of SRL

No	Forethought phase	Criteria				Total f (%)
		never f (%)	Seldom f (%)	often f (%)	usually f (%)	
Task analysis						
1	Goal setting	47	45	7	2	100
2	Strategic planning	52	42	5	2	100
Self motivation						
3	Intrinsic interest	22	38	18	22	100
4	Outcome expectation	10	52	28	10	100
5	<i>Self efficacy</i>	7	45	25	28	100
	Total	27	43	17	13	100

Table 1.2 Performance phase of SRL

No	Performance phase	Kategori				Total f (%)
		never f (%)	Seldom f (%)	often f (%)	usually f (%)	
Self Control						
1	<i>Imagery</i>	8	52	23	17	100
2	<i>Self instruction</i>	15	50	25	10	100
3	Task strategic	40	22	0	38	100
4	<i>Focus</i>	2	40	32	27	100
Self observation						
5	<i>Self experiment</i>	25	50	15	10	100
6	<i>Self recording</i>	5	42	20	33	100
	Total	16	43	19	22	100

Table 1.3 Self Reflection phase of SRL

No	Self Reflection phase	Kategori				Total f (%)
		never f (%)	Seldom f (%)	often f (%)	usually f (%)	
Self Judgment						
1	<i>Self evaluation</i>	20	48	23	8	100
2	<i>Causal attribution</i>	15	45	28	12	100
Self reaction						
3	<i>Adaptive</i>	12	53	20	15	100
4	<i>Satisfaction</i>	2	15	30	53	100
	Total	12	40	20	22	100

Table 1.4 The crosstab between forethought and performance phase

Forethought phase	Performance phase			Total
	worse	enough	good	
worse	3,3	5	0	8,3
enough	5	66,7	10	81,7
good	0	5	5	10
Total	8,3	76,7	15	100

Tabel 1.5 The crosstab between performance and self reflection phase

Performance phase	Self reflection phase			Total
	worse	enough	good	
worse	3,3	5	0	8,3
enough	8,3	48,3	20	76,7
good	0	5	10	15
Total	11,7	58,3	30	100
Path analysis	T-Statistic = 2,969, Path coef = 0,374			

Tabel 1.6 The crosstab between forethrough and self reflection phase

Self reflection	Forethrough phase			Total
	worse	enough	good	
worse	3,3	8,3	0	11,7
enough	5	50	3,3	58,3
good	0	23,3	6,7	30
Total	8,3	81,7	10	100
Path analysis	T-Statistic = 3,073, Path coef = 0,576			

DISCUSSION

The forethrough phase consists of two subvariables ie task analysis and self-motivation. Table 1.1 shows that in the forethrough phase of task analysis is less than optimal. Most of students seldom do strategic planning and goal setting learning. Most students often make learning goal orientation, learning expectations criteria and rarely have self efficacy study.

The forethrough phase is the first phase among of phase of SRL in which the students are required to prepare the material before learning process. The forethrough phase is important in learning cycle of SRL because it determines the success of the next phase. Students will prepare the lesson plans, to know the schedule of lectures (Zimmerman, 2004). Besides identify the learning goals, students are also required to find the best way to divide the topics and skills to make it easier to understand (Ormrod, 2012). Students who do not have the motivation to be a hedge on the results of the implementation of tasks resulting in less than optimal preparing lectures anyway (McMahon, 2001).

The performance phase consists of two variables, self-control and self-observation.

Table 1.2 shows that the performance phase of self-control subvariable obtained most students rarely do the imagery learning, self-instruction, tasks strategy performance. Conversely, it can be seen that most of the students always focus on learning. In subvariable self-observation, most students rarely perform self experiment. Instead, most of the students are always doing the self recording.

Increased student achievement in the classroom, not only the need for a task strategy, goals setting and good self efficacy, but also need a good student performance in the classroom. Students must master the knowledge and skills that make high performance (Mezei, 2008). Student get standard and goals setting which conduct self monitoring and self evaluation of cognitive processes. If our thoughts and actions are under the self control without any coercion of others, it is called SRL (Zimmerman, 2010).

In a previous study showed that the performance phase is generally more supportive theory of Zimmerman in 2012 than forethrough phase. It is based on self-control strategy of students who have high achievement is more significant than the students who have low achievement during the learning process. Students who have a high level achievement will have metacognition assessment and self-control better than students with low achievement (Zimmerman, 2012). Some of the factors which can hinder a person's psychological in the performance phase, they are are : 1) decreased visual acuity; 2) adequate lighting; 3) The bright colors that contrast for props; 4) the ability of loss hearing; 5) the ability to distinguish sounds less with age (Nursalam, Effendi, 2008).

In this study, students still have self control and low self-observation. One way to carry out minimal student is seeking the help of a friend, assessed personal strengths in developing strategies for learning and evaluating learning goals (Schunk, 2001).

Students who successfully organize themselves in the learning process are those who are trying to focus their attention on the learning and removes from distracting thoughts. Another approach is to enhance the learning process by providing the training in peer mediation, in which students help each other to solve interpersonal problems.

However, students are expected to have a concept of SRL can emphasize intrinsic motivation to learn that other factors may be controlled to achieve a learning competencies (Syah, 2003).

Self reflection phase of SRL includes self Judgment and self reaction. Table 1.3 shows that the self-judgment is less than optimal, it can be seen most students rarely perform self-evaluation, self-attribution. In self subvariable reaction, adaptive learning attitude. In contrast, large of students have very often and always satisfied on learning.

Self-reflection phase is set up of self-evaluation standards, establish the cause of problems in the process of learning. Students defense mechanism and coping strategies of adaptation to establish more effective learning for oneself. students with high achievement more likely to have causal attribution in the performance phase of SRL, satisfaction of learning and adaptive response in achieving learning goals than students who are low achievers (Zimmerman, 2012).

Self Attribution is one's cognitive factors through mental activity believing all things that can lead to success. Students have certain criteria and hopes to achieve a competency learning goals and students know how to get it. For example, students have the amount of time needed to prepare the exams and the students know how to interpret the test to be passed. The attribution factors that affect student learning success are: 1) emotional reaction to the successes and failures; 2) the expectation of future success; 3) options in the future; 4) efforts and perseverance; 5) learning strategies and performance in class (Ormrod, 2012).

Students are less able to manage time to learn well and learning contract strategy is less effective in feedback evaluation should ideally be more than one. This is consistent with previous research that says that in an evaluation of SRL, the feedback should be conducted more than once (Pintrick, 2004).

Based on table 1.4, the crosstab correlation between forethrough phase and performance phase have a value both largely have enough value, less has good value and less. However, in cross-tabulations can not be found good value forethrough and performance phase.

In learning goals, students are also required to find the best way to choose the

topics and skills to make easier to understand. Step of task analyzing is to identify the knowledge and specific behaviors which are essential for learning. The task analysis can be useful to select the most appropriate method for the study of learning (Ormrod, 2012). In previous studies mentioned that the strategic planning has a significant correlation value between forethrough and performance phase. Students who have more time in the forethrough phase of the learning process will produce a better performance phase in the implementation process SRL (Zimmerman, 2012).

Self-efficacy affects students in learning activities, objectives and efforts as well as the persistence of students in activities in the classroom, thus self-efficacy will affect student learning and academic achievement. Students who have high self-efficacy tend to be a lot of learning and achievement than students who have low self-efficacy (Matuga, 2009). There are several factors that influence the development of self-efficacy, namely 1) the success and failure of prior learning, 2) learning support from significant others, 3) the successes and failures of other students and 4) the success and failure in larger groups (Ormrod, 2012). Knowledge is known as a transfer material and a skills component that is critical to the process of implementation of the activities a person (Bandura, 2006).

One of the factors that affect a student is having problems, both internal and external (Agina, 2011). Students mentioned that there is a decrease in motivation in learning resulting in a lack of forethrough phase. This is consistent with the concept of self-regulated learning that the forethrough phase has an essential role in the success of further learning. Improved preparation phase as the base material for scores learn better in class (Bandura, 1982). Student perceptions are not considered essential learning will have an impact on learning outcomes. Previous research found that the achievement of learning objectives are influenced by perceptions of students in the learning process. Perception will affect students in making adaptive strategies to achieve goals that include the awareness of students to think critically, run metacognition that will affect the achievement of learning objectives (Artino, 2012).

Based on the cross tabulation table 1.5

correlation between performance and self-reflection phase. It has a value both nearly half and enough value, a fraction of better and less. However, on cross-tabulations can not be found either performance phase or self-reflection value.

The achievement of a competency can be gained by trying to imitate people who do well and to adopt the solving procedure of problems which encountered in learning from a good facilitator done (Nicole, 2011). Students in addition to observe and try, they also will get the achievement of the results of operations to be carried. In this performance phase, requires a strategy for self-control in the implementation process of learning, self-control components include self instruction, focus, imagery and task completion strategy. During the performance phase if it is implemented consistently and effectively, it will result in the ability of certain skills. The ability of self-monitoring and self-observation will also facilitate the phase of self-reflection in the process of self-evaluation and self-attribution so that students are able to adapt the learning process to achieve the expected competencies (Ormrod, 2012).

Based on previous studies that have mentioned that performance phase can affect self-reflection. This can be explained that more and more task strategic performed, self-evaluation, self attribution and learning how to accept the results with satisfaction. This result is important for the facilitators and students to pack the task becomes a plan SRL and became the standard appropriate to assess student satisfaction according experiential learning (Zimmerman, 2012).

Based on cross-tabulations 1.6 relations between self reflection and forethrough phase. It has a value of both the half had enough value, a fraction better and less. However, on cross-tabulations can not be found either implementation phase value and the value of self-reflection is less.

In self-reflection phase, there is an ability of self-evaluation, self-attribution, satisfied attitude and able to adapt. Self-evaluation is more likely to be influenced by the performance of other friends who have a certain standard and level of the previous assessment. Attribution themselves influenced by the background a person's beliefs about success and failure. It is important to achieve a successful learning (Schunk, 2004). Failure

attribution in controlling the causes of learning problems are usually influenced by the inability of the skill, less strategizing achievement of objectives (Huy, 2010). Adaptation experienced for students who often risk failure is a defensive attitude to learning, such as the attitude of avoiding the task, not understanding the material received and apathy (Ormrod, 2012).

In a previous study also mentioned that the forethrough will affect the self-reflection phase. It is added by having a good metacognition will increase student self-evaluation based on the results of student competency achievement. Metacognition can also significantly improved by student achievement results satisfaction scores resulting in student performance can also showed a good attitude (Zimmerman 2002).

Self-evaluations of SRL leads to attempts in comparing the information obtained through the self-monitoring with a standard or set objectives in the preparatory phase. In addition to self-evaluation, self-reflection also has a self-reaction activities. Self reaction is continuously carried out will affect student learning and preparation phase often have an impact on the performance phase that is displayed in the future against the objectives set (Susanto, 2006).

CONCLUSIONS

Development of internal factor SRL formed from forethrough, performance and self-reflection phase. It determines the success of the forethrough and the performance of the self-reflection phase.

RECOMMENDATIONS

The SRL can be generally applied to nursing education, especially at the undergraduate level. The nursing education institutions are expected to implement the SRL to increase student motivation to learn. Future studies should further examined the preparatory phase SRL by considering extrinsic factors that affect the learning process as a means of satisfaction infrastructures, methods of learning, family support and psychosocial aspects of the student.

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ENGLISH ROLE PLAY ACTIVITY RESEARCH ON BLOOD PRESSURE MEASUREMENT IN NURSING CLASS

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ABSTRACT

Introduction: In teaching English of nursing students, the students in the class found difficulties in the communicative activities. They also have problem in understanding how to do tasks, and they may find it difficult to work with partners. To bring success of nursing students' speaking skill, communicative approach in teaching language with a communicative and meaningful role play task can be applied. Therefore, the researcher wants to conduct research on how the instruction can be arranged to bring the low ability students' success with a communicative, meaningful role play task. The researcher taught the English skill needed to do the role activity of blood pressure measurement in two weeks, and then the students prepared and presented the role play of blood pressure measurement on the last two days. **Method:** The respondents were 33 students in a nursing class. The sample was 10 students taken by *simple random sampling*. Data were collected through student questionnaires, field notes from a class observation and audio-visual (video) recordings of role play presentations. **Result:** Result showed that the students did not find any difficulties in the role presentation and they enjoyed it especially after looking at their recordings. **Discussion:** The research showed that in the nursing class, the students have the ability to successfully participate in communicative activities, including role play. This can be a new way of structuring lessons that will progress from simple, more guided activities to more advanced, less supported activities that allowed students to manage their own language.

Keywords: communicative approach, role play, blood pressure measurement

INTRODUCTION

Nowadays, the globalization era demands the nursing profession in the Indonesia to be able to compete by improving the quality of nursing care and have an English communication skill. As Ribes and Ros (2005) testify, experts who work in the field of medicine are constantly forced to deal with English both when they have to attend international conferences and meetings, and every time they require to read and examine documents including the latest medical research or the most recent studies in all those disciplines directly related to medicine. There is a huge demand for nurses at the international marketplace, but only very few Indonesian graduate nurses qualify for employment abroad. According to Mufti (2009), nursing graduates have very limited clinical skills and their professional competency is weak due to the limited exposure to the clinical areas during the basic training years. Dealing with this problem, in teaching English of nursing

students, the writer uses a communicative method. The communicative approach includes using activities that simulates language used in real-life of clinical settings. Krashen (2008) stated that the communicative approach is an effective way of teaching students' skills. During the studies in the English class of nursing students, she did not observe many communicative activities. The students found difficulties in the communicative activities. As the lecturer of this class, she noticed that they also have problem in understanding how to do tasks, and they may find it difficult to work with partners. Then, she discusses with other colleagues who are also teaching them, they said that they also struggle with how to do communicative activities with them. Therefore, she applies role play in teaching them because as Huff (2012) stated that to bring success of nursing students' speaking skill, communicative approach in teaching language with a communicative and meaningful role play task can be applied. Role play is a

teaching method that has been used widely for experiential learning and provides an imaginary context in which issues and behaviors may be explored by participants who take on a specific role or character (Ching, 2014). As Redden (2015) said that role play can provide the students both locally and wide reaching so that students can be prepared for the clinical setting both while in college and after they graduate. Moreover, role play activities provide students with communicative competence, so that students feel comfortable to interact with people in the outside world. In this research, the researcher wants to conduct research on how the instruction can be arranged to bring the low ability students' success with a communicative, meaningful role play task. In this case, the students are asked to conduct role play activity on blood pressure measurement. Blood pressure measurement is part of vital signs which they, as nurses, should master to practice the English communication related to it. During blood pressure measurement, they should communicate first with the patients about what they are going to do with them and there are some instructions expressed by them to the patients.

RESEARCH METHOD

The research used the qualitative paradigm and specifically the methodology of action research. As one type of the qualitative research is action research. Action research was chosen for this study in order to explore the researcher's class. In the action research, she played a dual role, as researcher and lecturer. The research question came from a reflection and assessment about her ability to effectively use the communicative approach with her English Class. The participants in this study were 33 students in her second level English class where she taught. They were from many areas in Indonesia and speak many languages (Madurese, Javanese, etc.) with strong dialects and the grade of English in the first level was low. The sample was 10 students taken by *simple random sampling*. In this research, there were three data collection methods: field notes, audio-recordings, and questionnaire data. The researcher wrote on her impressions on the effectiveness of the classes. The field notes were used to adjust how the classes were taught and to gain insights on teaching during two weeks of class. The presentation of the role plays were audio-

recorded, transcribed and evaluated using a rubric. The students gave their feedback by responding to a questionnaire. The procedure of the research was the researcher first taught the students the skills necessary of role play activity on blood pressure measurement for two weeks and then had them present it on the last two days.

Table 1. *Lesson Plan - Activities Simple to More Complex*

ACTIVITIES
1) Students practice of question and answer about blood pressure measurement
2) Students fill-in three blanks in a written dialogue of blood pressure measurement
3) Students select the appropriate response to a sentence amongst four choices
4) Students write the nurse lines in a one-sided dialogue as an all-class activity
5) Students write the patient lines in a one-sided dialogue as an all-class activity
6) Students write a complete dialog as an all-class activity
7) Students prepare and present a role play activity in pairs

From the table above, it shows that the progression from the sample to more complex activity. In this case, the nurse role is the harder role since this is the role that the students are less likely to play in real life. The data from Field notes were analyzed by typing up, rereading, and fleshing out within a day of collection to see if there were ways of scaffolding that had been learned that could be incorporated into the next lesson. The data from audio-recordings of the role play presentations were analyzed by transcribing and assessing by a rubric and then the students were rated on their ability as being high, medium, and low.

Rubric for Role Play

Communication on blood pressure measurement

Student ID # _____

Circle The Scores				
Categories	None	Low	Medium	High
1. Worked independently	0	1	3	5
2. Spoke confidently		1	2	3
3. Used grammar correctly		0	1	2
4. Spoke understandably		0	3	5

	No	Yes
5. Include all speech acts	3	5
6. Spoke creatively	0	1

Figure 1. Rubric for Role Play Assessment

The data from the questionnaires which had closed questions were easily analyzed by counting the answers with the totals being used and presented in chart. In this research, the triangulation came from collecting data via three different methods: field notes from the researcher's point of view, a questionnaire from the students' point of view, and an audio-recording from the students' role plays. The ethics of this research was there was confidentiality for the participants and random number assigned to each student. The students were referred to in field notes and identified in the research report by these randomly assigned numbers. Audio transcriptions were verbatim, and students were identified by these assigned random numbers in the transcription. In this research, the researcher was also the lecturer of the class.

RESULT

During the three week period, field notes were taken to document my observations and insights. During the last class, students participated in the role play. The role plays were audio-recorded and transcribed. Students' evaluations were obtained by having the students fill-out a questionnaire stating their opinions and reactions with the help of interpreters. In these field notes, the focus was on how to support the students and lessons learned about teaching. Each note consisted of an observation, and how it was significant to teaching. The field notes included relate to the notes that discuss the most significant fourteen observed insights gained from the action research. These insights will lead to changes, such as encouraging students to help one another, spending more time reviewing material, incorporating student presentations into lessons, and adjusting how she scaffolds activities. The role plays were recorded, transcribed, and assessed. There were ten students who presented role plays and 23 of them were research participants. From the transcriptions, the students' role plays were assessed through a rubric. Analyzing the role plays will give direct research data for the

research question by looking at the effectiveness of the role plays prepared and presented by the students.

The scores of rubric which consisted of six categories were shown per category for each student in Table 2.

Table 2. Role Play Scores Per Category

Circle The Scores	Student Identification Numbers										Ave rage
	1	2	3	4	5	6	7	8	9	10	
1. Worked independently	5	4	5	5	4	4	5	5	4	4	4.5
2. Spoke confidently	3	3	3	3	2	2	2	2	1	2	2.1
3. Used grammar correctly	2	1	1	2	2	2	2	1	1	2	1.6
4. Spoke understandably	3	3	3	5	4	4	4	4	3	5	3.8
5. Include all speech acts	4	5	5	5	4	5	5	5	5	5	5.6
6. Spoke creatively	0	0	0	0	0	0	0	0	0	0	0

From the table above, it shows that in the category of *Worked Independently*, half the students received the maximum score of five points. All students needed some help to get started with the role play. In the category of *Spoke Confidently*, most students received a score of two points. When practicing, the students only read their role plays a couple of times. In the category of *Used Grammar Correctly*, half the students received the maximum of two points. There were some grammatical structures that were frequently correct. In the category of *Spoke Understandably*, all but two students received the maximum points of five. This category measured if students' language was intelligible in the role plays. In the category of *Included All Speech Acts*, most of the students received the maximum of five points. Students were generally able to include all the information on the role play card for their role. In the category of *Spoke Creatively*, all students received no points. The previous practice in the all-class activity had a set structure. The results of total points per student were shown in Table 3. All pairs of students had a conversation that was presented to the class. The score range was at 14 points to 20 points. Three scores were

near the maximum with points in the range of 18 points to 20 points. The overall scores help to answer the research question of the possibility of being successful with a role play activity with low ability students. Most of the students scored high on the rubric that evaluated the role play activity. This provides research results that low ability students can be successful in doing a role play activity.

Table 3. Role Play Scores Per Student

Students' identification Number	Score
1	17
2	16
3	17
4	20
5	16
6	17
7	18
8	17
9	14
10	18

Student Questionnaire Results

After the role play was completed, the students filled out a questionnaire. The questionnaire asked if the students found the role play activity to be enjoyable, too easy, and too hard. The questionnaire also asked if the students believed that they could use English communication on blood pressure measurement. The results are shown in Table 4

Table 4. Student Questionnaire Responses

Questions	Yes	No
1) Did you like the role play activity?	10	0
2) Was the role play easy?	7	3
3) Was the role play too hard?	3	7
4) Can you use English communication during blood pressure measurement?	10	0

Question one asked if the students enjoyed the role play activity. All the students enjoyed the role play activity for various reasons. The first, student liked it because he or she had learned how to use English communication during blood pressure measurement. The second, student liked having the interaction with another student. The third reason was the student thought the role play activity was fun. This student wrote, "...because I learned and it was fun!" The fourth reason, it was important because at home there are no interpreters to help practice

it. The fifth, student liked the fact that it was different. This student wrote, "... because it was a new language learning experience." The second and third questions asked if the student thought the role play activity was too easy or too hard. Most students found the role play activity was neither too hard nor too easy. This would lead to think that the student found the role play activity to be challenging. The student wrote, "At first I didn't know, but as I am learning, it was not too hard." The fourth question asked if the students thought that they could know how to use English communication during blood pressure measurement. All students thought they could do it. The student wrote, "More or less I could do it. The way you taught it was good." Overall, the students found that the role play activity was a positive experience. The students enjoyed the role play activity and felt that they learned how to use English during blood pressure measurement. The questionnaire results provide some evidence towards a positive answer to the research question on whether low ability students can successfully participate in a role play activity. The answers show that the students believe that the role play activity was a success.

DISCUSSION

One, the strategy which is from simple activities to more complex activities was an effective teaching method. In the role plays, the students were able to use language that would be similar to real world language, and the students were able to incorporate grammar and vocabulary previously taught in lessons. Improved grammar skills due to explicitly teaching grammar is consistent with Brown's view (2007) that teaching grammar can aid in communicative competence. The second, planning activities for low-ability students limiting the number of choices that students have to select the correct answer makes that activity more guided, manageable, and successful. This is consistent with Hammond and Gibbons (2005) recommended design scaffolding technique of a task building and leading into the following task. The third, further scaffolding would have been helpful in defining the role play, and the students understand the aspect of role play of taking on a role and being responsible just for one role. The fourth, expectations for students need to be realistic and defined by improvements and

not anticipated outcomes. The fifth, the lecturer can support students struggling by intentionally pairing with a more advanced peer. The sixth, activities can be modified to make them more manageable for low proficient student. The seventh, low-ability students will do role play activities well when they only need to add a few key pieces of information. The eighth, students need to feel an activity is beneficial before they put effort into repetitive practice that might lead to skill mastery. The ninth, role plays are positively received by students, and that their difficulty may be interpreted differently by the lecturer.

CONCLUSION

After conducting this research, the students have the ability to successfully participate in communicative activities, including role play. This can be a new way of structuring lessons that will progress from simple, more guided activities to more advanced, less supported activities that allowed students to manage their language. The recommendations are students should often present information in front of the class and they have to use their native language in the classroom, plan to do a task sets a long term objective, role play video can be used to show and explain to students how to do a new task.

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RELATIONSHIP OF LEVEL OF ANXIETY WITH LEARNING CLINIC ACHIEVEMENT MIDWIFERY STUDENT ON SURABAYA

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ABSTRACT

Introduction Objective this reasearch to determine the relationship between the level of anxiety with the achievement of clinical learning in the third semester students Midwifery Studies Program Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya. **Methods** This was an observational study with cross sectional analytic. A study population of 165 students and samples are 165 respondents, taken with total sampling technique. Respondent data collection is done by filling out a bio, a modified HAR-S questionnaire. Data were analyzed by Correlation Coefficient of Contingency. **Results** Data analysis showed p value <0.05 is equal to 0.000 and 0.615 r that have significant value showed relationship between the level of anxiety with the achievement of clinical learning 1 in the third semester students Midwifery Studies Program Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya. **Discussion.** There is a relationship between the level of anxiety with the achievement of clinical learning 1 in the third semester students Midwifery Studies Program Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya.

Keywords: *Anxiety Level, Achievement Learning Clinic, Student*

INTRODUCTION

In indonesia the growth of education institutions in the field of obstetrics is very fast. In the past five years, there are 52 university in indonesia implement the program education midwives and produce 3000 midwives every year. Rapid growth education institutions in thrust by many factors are to meet the needs of power midwives is weak. Therefore development of education midwives trying to improve the quality of their education that produced the quality of graduates that can be accounted for for the community and their profession (Rahmi, 2013).

To keep the quality of graduates education midwives, professional organization obstetrics had already prepared education standards profession midwives and competency standard midwives. In the education standards midwives mentioned that education institutions midwives must ensure the availability of education facilities clinic to university students consisting of the hospital education and facilities other health services necessary. This shows the role the hospital education in the process of education midwives very important especially for school tuition in achieving competency standard midwives (Rahmi, 2013).

With standard competence control by a midwife are expected to a midwife can do their job, and their using the ability to solve problems in the field of their. Besides it, there was a change in education midwives orientation, of education midwives penguasaan based science, to education paradigm competency based required on the service mother and child health in the community (Wisudaningtyas, 2012).

In the system learning midwife education, experience learners divided into learning theory, laboratory and learning clinic in accordance with the provisions kepmendiknas no.232/u/2000 on guidelines of the curriculum higher education and learning outcomes students, that the study in diploma consisting of 40 % theory and 60 % practices (Sofyan, 2014).

Clinic learning practices aimed to make students gain experience of learning in terms of applying science and skill learned in class of various science discipline in an integrated in real situations. This so that more students ready and confident in the conduct of the role of self-reliance, collaboration, as well as with proper refer in the management of all cases in order health services. Order health services are referred to is hospital, puskesmas, maternity homes, midwife practices private and health

services to the community through posyandu. Lessons on implementation practices clinic, students are required reach the target of the core competency skills timely.

Anxiety itself is a tense state excessive or in his administration marked by feeling worry , erratic, or fear .Anxiety usually first emerged in the anak-anak and teenagers (Maramis , 2009) Where at the age of this happen process of changing psychology and the formation of personality and vulnerable higher levels of anxiety (Tartakovsky, 2008).

Anxiety a positive effect and negative impact. A positive impact happen if anxiety appear at a mild to moderate and giving the power to do something , individual defense help build himself to fear felt can be reduced piecemeal (Qoisyi , 2011)

Anxiety direct somebody to took steps to prevent a threat or relieve as a result , example is studying actively to prepare faced a a test (Tartakovsky, 2008) .While the impact negative happen if anxiety appear at a high rate and gives rise to physical symptoms that can have a negative impact on study results (Qoisyi, 2009).

This research aims to understand relations between the level of anxiety by accomplishments learning clinic in midwifery students in semester III course of study obstetrics the faculty nursing and obstetrics university nahdlatul ulama Surabaya

METHOD

The research is research observational analytic with the approach cross sectional. Research carried out in University Nahdlatul Ulama Surabaya. Data obtained from due to the self respondents, modification the questionnaire HARS and value lessons learning practices clinic .The sample was taken by means of total of sampling as many as 165 college student. Data analysis performed with purpose to answer hypothesis research. So in this research used statistical tests that in accordance with a variable research namely tested by test the coefficients contingency by using spss 16.

RESULT

Table 1.The distribution of respondent based on their age

Age	Frecuency	Percentage
18	17	10,2%
19	73	44,2%

20	45	27,2%
21	30	18,4%

Source: primary data

Based on table 1 above can be seen that to scatter age at students semester III most ages 19 years 73 people (44,2%) , next ages 20 years 45 people (27,2 %) , then at the ages of 21 years as many as 30 people (18,4 %) and the lowest is age of 18 years 17 people (10.2%)

Table 2.The distribution of respondent based on the level of anxiety

The level of anxiety	Total	Percentage
Anxious	121	73,3%
Not anxious	44	26,7%

Source: primary data

Based on table 2 above it can be seen that the majority of respondents namely 121 people (73,3%) undergoing anxious , while as much as 44 were (26.7%) did not experience anxious

Table 3 .The distribution of respondent based on achievement of learning the clinic

Clinical learning achievement	Total	Percentage
Good	165	100%
Enough	0	0%
Less	0	0%

Source: secunder data

From table 3 it can be seen that overall respondents as many as 165 people (100%) has good achievements learning clinic

Table 4.Cross table relations level anxiety by accomplishments learning clinic

Clinical learning achieve ment	Level of anxiety		Total	Percentage
	Anxio us	Not anxious		
Good	121	44	165	100%
Enough	0	0	0	0
Less	0	0	0	0

Source: primary data

Based on table 4 above can be seen that of 165 respondents who get achievement learning good, 121 people (73,3%) undergoing anxiety and the rest those are 44 respondents (36,7 %) did not experience anxiety.

Using the correlation contingency obtained the value of 0,615 r and p of 0,000 showing that there is a very meaningful between the level of anxiety by accomplishments learning clinic students semester III course Diploma III obstetrics and faculty nursing obstetrics Nahdlatul Ulama Surabaya University.

Seen from table power correlation the coefficients contingency, obtained the results of relations between the level of anxiety by accomplishments learning clinic students semester III course of study Diploma III obstetrics the faculty nursing and obstetrics university nahdlatul ulama surabaya have the power correlation (correlation r) from which was 0,615 in which interpretation relations between the two variable having vigorous powers.

DISCUSSION

The results research shows that the majority of respondents experienced anxiety which was 121 respondents (73,3 %) , and only about 44 of (36,7 %) did not experience anxiety .This is supported with the statement that psychiatric disorder often suffered by teenager is depression and anxiety (Maramis, 2009 and Tarkovsky,2010) .

Respondents who experienced anxiety in accordance with the questionnaire HARS are more prevalent in the symptom of intelligence, somatic symptoms/ physical) (muscle, symptoms autonom and disorders mannerisms attitude. This implies that readiness someone influence on the anxiety someone in the face of learning clinical practice. Anxiety is a certain circumstances (state anxiety), namely in a situation uncertainty and erratic its ability to face the object.

Anxiety basically is reasonable in the soul of individuals because everyone must have anxiety. But what deserves consideration is anxiety cannot be allowed too long settles , because it can be led to the decline in spirit performed well. Anxiety not always sent down the ability of an individual in resolving tehm anxiety, but can be force or motivation to make better preparation and in self in face and finish the anxious (Andri, 2011).

Although anxiety experienced individuals not always a negative impact on himself however specific anxiety symptoms experienced student can interfere with and

affect their function in the process of learning and function as well as interpersonal intrapersonal. In this regard need of efforts to combat symptoms of anxiety to not to disrupt the students in perform its function well on campus and in the community (Lestari, 2010)

Anxiety cause kids to be alert and improve roomy perception that would motivate learning and produce growth and creativity especially as regards is to face learning clinical practice.This suggests also that anxiety can be make a difference positive for the achievement of learning clinic.This shows that mild anxiety the students can only me motivation learn from more than half a student who worry.Students with anxiety having a mind focused on his attention and in relation to this mind focusing is learning clinic. (Hashmat, 2008).

When more students focused on preparation learning clinic allow students not to think about other things are not important, so could get a positive effect.

CONCLUSION AND RECOMENDATION

Conclusion

Many students experienced anxiety on learning clinic. Achievement learning practices clinic in a student on the students semester III course of study Diploma III obstetrics the faculty nursing and obstetrics university nahdlatul ulama surabaya overall the results good. Very meaningful between the level of anxiety by accomplishments learning clinic students semester III course Diploma III obstetrics and faculty nursing obstetrics nahdlatul ulama surabaya university.

Recomendation

For college students expected to read a book and reference books on the relevant practices clinic .Is expected to with many read and learn more students ready and has not anxiety during a learning clinic. For tutors institutions and land practices is expected to provide training and guidance to his students to avoid anxious on learning clinic.

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EFFECTIVENESS OF ACHIEVEMENT IN LEARNING MEDIA INSTALLATION OF COMPETENCE NASOGASTRIC TUBE (NGT)

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ABSTRACT

Introduction : Before learning skills lab, students are taught about the first concept through demonstration NGT installation procedure . With concept of competence expected of students were able to carry out the installation stages NGT properly while following the activities of the lab skills , but in fact the student mastery of the stages of installation NGT less , so the professor had to repeat the administration 's theory that the NGT installation skills lab time is getting longer and more heavy burden of lecturers to be done . The development of information technology and today is rapidly included in education that impact the ease of learning embodied in a computer learning media. **Method :** The research design is Quasy Experimental posttest control group design with the aim of analyzing the effectiveness of the media in achieving the learning computer competency NGT installation . **Result :** Data collection was carried out observations with the results of the average score of the experimental group (78.03) and the control group (76.76) with difference scores (1.27) . While Mann Whitney test results indicate that the use of instructional media in achieving computer competencies NGT installation is no more effective as evidenced by the value of $\alpha = 0.092$ (> 0.05) . **Discussion :** The sophistication of a medium of learning is not a guarantee that the media are most effective so that the selection of instructional media appropriate to the needs , circumstances and conditions of each party involved in learning are indispensable.

Key words : *Learning Media , Nasogastric Tube Procedur*

INTRODUCTION

Competence can be defined as the ability of a person who can be observed which includes knowledge, skills and attitudes to complete a job or task to the standard performance that has been set (PPNI, 2005) (PPNI, 2005). Lab skills learning is a practice activities of nursing procedures in the laboratory after the students understand the stages that should be done at a certain nursing procedures. Student's ability to perform the installation of NGGT in every stages when joining lab skills was not in line with the expectations. Based on the results of the preliminary study on June 7, 2012, conducted by the researcher in the form of interviews with 15 students in the first level of Diploma 3 in Nursing Study Program 2011/2012 Lawang found 10 (66.6%) were not able to mention the equipment preparation in the installation NGT correctly and 8 students (53.3%) were not able to perform the installation procedure NGT in the order correctly. The inability of students in mentioning the equipment preparation needed in NGT's installation obstruct the lab skill activities, and the lecturer must repeat the

material that has been given so the learning lab skill will take longer.

To promote the understanding of students at some nursing procedures it is necessary to give the correct methodology and instructional media support. The use of computer media in the learning process can motivate students and improve their knowledge and skills. The availability of good media and appropriate learning is one solution to the problem of learning so that students are able to understand the material given (Warsita, 2008).

The purpose of this study is to analyze the effectiveness of computer-based learning media in achieving competence NGT installation on the student in Diploma 3 Nursing Study Program Lawang in hopes to be useful for lecturers in presenting the material about the the installation of NGT and helping students in achieving competence the NGT installation and make the learning more varied.

RESEARCH METHOD

This study using the Quasi-Experimental posttest control group design (Arikunto, 2006).

For the treatment group, the researchers used the computer learning media independently 2x60 minutes to deliver the learning. While the control group, the researchers used the media / tools with demonstrations method for 2x60 minutes to deliver the learning. This study conducted at the Diploma 3 Nursing Study Program Lawang in September-October 2013, and 70 people of the population is students of Diploma 3 Nursing Lawang level IA first semester academic year 2013/2014. The samples are 54 respondents drawn by using a sampling technique is purposive sampling with samples of the following criteria: is able to operate the computer and are willing to become respondents.

The variable in this study is the achieving competence NGT installation media. The learning media variable used is the using of computer as a learning media which contain the material of NGT installation procedure by students in independent learning for 2x60 minutes. While students' achieving competence NGT installation is measured by scoring in doing every step of the installation of NGT on the model anatomy.

Data collection begins with a computer-based learning media with NGT installation material and followed by making of research instruments. Researchers chose the respondents who are potential as sampled respondents. For respondents who are potential, they will be given an explanation about purposes, objectives and advantages and disadvantages of being respondents in the study. After that the respondents given the *informed consent* of research and the potential respondents are willing to sign a statement of the respondents. Researchers obtained 29 respondents from Level IA as the treatment group and 25 respondents from level IB as the control group. For each group performed the learning which treatment group was given the independent learning using computer-based learning media for 2x60 minutes and the control group was given the demonstration learning for 2x60 minutes. Both groups were given the opportunity once to do the stages of installation NGT independently on an anatomical model. On the next day related to the contract with the respondent, the researchers conducted the observations of competency achievement NGT installation in the treatment group and the control group.

Instruments in this study using a checklist. Checklist is an instrument of evaluation of learning through observation for the assessment (Suryadi, 2008). Checklist in this study contains of 20 items on stages of NGT installation skills. Assessment is done by giving a score on stages of NGT installation that was done by the students with the following score 0: Not done (steps or activities that should be done, when the observation or observation is not done), a score of 1: done but it's not perfect (step or the procedure has not been done properly, or not in order, or some steps are not done) and a score of 2: completely done (all the steps or procedures were performed properly and in order). The scoring is summed and divided with maximum score (60), multiplied by 100, so there is the maximum score of NGT installation skills 100. The scale of data used in this study is the interval.

Processing and data analysis obtained from the respondents then performed encoding, editing of data when there is incomplete data and tabulating the data. To know the effectiveness of computer-based learning media to the students' competency achievement in NGT installation is done by analyzing the data using the "Mann Whitney" with a level significancy (α) 0.05 (Sugiyono, 2010). When the results is $\alpha < 0.05$ then hypothesis (H1) is accepted, it means that computer-based learning media is more effective to the students' competency achievement in NGT installation.

RESEARCH RESULT

Research Site

Diploma 3 of Nursing Study Program Lawang is one of Diploma 3 of Nursing Study Program which is owned by the Department of Nursing Malang. The students in Diploma 3 of Nursing Study Program Lawang Academic Year 2013/2014 were 230 students, and the students at the first level were 70 students. The NGT installation material is one of the materials in the subject of Basic Human Needs.

Characteristics of Respondents

Gender

Tabel 1 Respondents' Characteristic based on Gender

No	Gender	Frequency	Presentage
1	Male	15	28%
2	Female	39	72%

Total	54	100%
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Based on Table 1 shows that the majority of respondents were female (72%).

Competency Achievement of NGT Installation

Results of the analysis of the scores of the achievement of the competence in the experimental group and the control, the result is:

Table 2 Competency Achievement Installation NGT

	Post Treatment	
	Experiment	Control
Mean	78,03	76,76
Median	79	77
Standard Deviation	2,860	3,018
Minimum	71	71
Maximum	81	81

Table 2 shows that the average score of the competency achievement of NGT installation in the experimental group (78.03) and the control group (76.76) with range scores in both groups (1.27), in other words the use of computer-based media in a learning achievement of NGT installation gave a better score. The score differences of competency achievement of NGT installation experimental class and control class is small (1.27). However, to see if the differences are significant or not there will be a statistical test.

Normality Test

Normality test is conducted to know the competency achievement data of NGT installation have a normal distribution or not between the experimental class and control class. Normality test is using the Kolmogorov-Smirnov test statistic by the calculation of the normality test the experimental class derived class $P = 0.000$ and $P = 0.005$ obtained control. By comparing the value of $\alpha = 0.05$, then obtained for the experimental class $P = 0.000 < \alpha (0:05)$ and to control class $P = 0.005 < \alpha (0.05)$. It can be concluded that both the data distributed is abnormal.

Homogeneity test

Homogeneity test was conducted to determine competency achievement data of NGT installation have variances homogeneous or not. The results of homogeneity test of competency achievement data of NGT installation between the experimental class and control class is $P = 0.515$. By comparing the value of $\alpha = 0.05$, then $P = 0.515 > \alpha (0,05)$, so

it can be concluded that these data come from populations with the same variance (homogeneous).

The Differences of Competency Achievement Test 2 Class Sample (Hypothesis)

After being tested for normality and homogeneity tests competency achievement data in NGT installation known that the spread of the experimental and control class score distributed is not normal, so to see how effective the use of computer-based learning media in competency achievement in NGT installation can be identified by the use of the processing method Mann-Whitney Test with a significance level of 5%. The results show that the processing of significance (P) is 0.092. Because of the significance of $P (0092) > \alpha (0,05)$, H_0 accepted. It means that the use of computer-based learning media is not effective in achieving competence in NGT installation.

DISCUSSION

Based on the results of data processing shows that the average score of competency achievement in NGT installation in the experimental group (78.03) and the control group (76.76) is the average difference scores in both groups (1.27), in other words the use of computer-based learning media in competency achievement in NGT installation gives a better average score. But to see the effectiveness of the use of computer-based learning media in competency achievement in NGT installation differential test. Differential test performed using the Mann-Whitney Test with the significance level of 5%, which shows that the effectiveness of the use of media computer learning together with the the use of learning media by using media / aids in the demonstration in competency achievement in NGT installation shown with the significance value of $P (0092) > \alpha (0.05)$.

Each of learning media has advantages and disadvantages, so to deliver a different message; it's needed to give a different media. However, the level of effectiveness to deliver the message, the specific media is quite different especially considering the advantages and disadvantages that are owned by each instructional media. Based on the advantages owned by the computer media, there are advantages not owned by other media, for example, the ability to facilitate the students interactivity with learning resources (content)

that exist on the computer (man and machine interactivity) (Warsita, 2008).

The use of computer-based learning media is unlimited such as on campus, dormitories, at home or somewhere else, and not limited by time where students can use it whenever needed. Although the use of computer-based learning media and demonstrations in this study was given only one time, but it has been able to show the better range of the average, even though it is only a small number (1.27). The demonstration learning in teaching in the Department of Nursing performed only one time by the lecturers constrained by the time planned in the academic year. By contrast, the use of computer-based learning media has a greater chance in doing learning repetitions independently by students, so it is help the students to master the material better than before the students join Lab Skill activities. When joining the lab skill activities, students must understood the NGT installation procedure expected there are no more professors repeating in delivering the installation procedures, students simply perform stabilization and train their motor skills. Computer-based learning media as a learning resource that can be seen and allowed the lecturers to interact with the students, it is very important in supporting skills. Many procedures skill are difficult to be understood if it is only written in the text but will be easier if indicated in audiovisual. Computer-based learning media skills should be learned before the implementation of the practice with the instructor / lab skills (Suryadi, 2008).

The success of using the media in the learning process to improve the learning outcomes is not enough to know the advantages and disadvantages of a learning media, but it also to be noted to the contents of the message, how to explain the message, and the characteristics of the recipient of the message. In selecting the media, need to be adjusted to the needs, the situations and conditions of each. If the teaching materials are packed accurately and presented to the students it will get higher learning outcomes. It doesn't mean that the more sophisticated media used will be the higher of learning outcomes or otherwise (Wibowo, 2005).

This condition indicates that the computer-based learning media is media that is more sophisticated than a demonstration, but

the effectiveness in competency achievement is not higher. In this study computer-based learning media used is still simple because the visual is not used 3-dimensional and does not use the more sophisticated programs so as learners have not been able to feel as if dealing directly with patients. It does not cover the possibility by using the sophistication in visualizing the NGT installation will provide a better learning outcomes but these conditions required the support of a bit of consequence.

CONCLUSION

The effectiveness of the use of computer-based learning media is not effective in competency achievement in NGT installation, so it is suggested to the lecturers that computer-based learning media is no guarantee that the media is the most effective. Suggestion for lecturers is to select the learning media properly that suit in their needs, situation and condition of each part in learning and with a mastery of making the media. And for the students advised to be more focus on the material during the learning so that the learning media of any kind used by lecturers will be easier to understand and master the material. All of them need the full support of the institutions in ensuring the availability of instructional media and simultaneously update the teacher's ability to use the media that is required in the learning process

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DISTANCE LEARNING USING SOCIAL MEDIA IN NURSING EDUCATION PROCESS

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ABSTRACT

Introduction: The free trade era open new challenges and opportunities in teaching and learning process. Information and communication technology has been predicted to become facilitator of successful achievement in the process to face trading system which related with high competency and standard. Students has tendency to use social media to learn subject related with their inquisitive. One of it is LINE[®]. The purpose of this study is to test students respond of online learning media using LINE[®] in teaching-learning process to prepare student facing the new economical era. **Method:** 19 participants from Diploma of nursing program, STIKES Suaka Insan Banjarmasin had been collected to participate in the program using social media as a media of learning. ASSURE model titled "Communication between health professional in the context of patient safety" had been developed as the concrete guidance to guide student and also coordinator in the learning activities for 10 days of learning using LINE[®]. **Result:** Students of nursing participate in the online course using LINE[®] with different responses. They confidently ask the question related to the topics which coordinators had been posted. But, students admitted that they still prefer to choose face to face learning. The long waiting time is one of the disadvantage on using this media. **Conclusion:** LINE[®] can be used as one of the media of learning in the distance learning concept and process. But, it stills need high commitment from both students and teachers to continue the process until the end and get the result from the study.

Key words: *Distance learning, communication, education*

INTRODUCTION

Free trade era brings many chances in the country who follow the system. Not only in the economic or political area but also in Nursing as part of the economic basis who support the workers in health system. Openness and high competencies become two from many kinds of essential characteristics in free trade system. Nursing system as part of this huge system prepared themselves to face the big challenges in this new era of trading. With help from advance communication in the digital area and technologies, the challenges will turn to be some advantages which will help country and people in the country especially developed country like Indonesia.

STIKES Suaka Insan as part of the nursing education system take the responsibility to being part of this opportunity to develop and provide good nurses who will compete well in the field of workers. The observation in the class among the student of nursing found that students prefer to make a group of learning thru social media. One of the most usable social media is LINE[®] and it is being part of the communication and also

learning process in the class. The function of the media in here more as a tool to transfer the information from one student into another. Example, the information related with the courses such as schedule of one courses or the information about the assignment.

Besides that, one of the example in nursing course related to learning experience is the topic about Patient safety. There are many topics in patient safety course which student must mastered but students have few times to learn with lecturer or teacher in the class room. Bad things happen when teacher still uses traditional lecture method to assist student to learn about certain topics but it did not cover all the important material or information that needed in practice. As result, students cannot get the whole cover topic they really want to learn and mastered. Sometimes, when they do not understand with the topics, they will ask teacher thru face to face meeting. From the teacher side, this activity will give disadvantage to the teacher because waste of productive time in the school or office.

From this background, coordinator of patient safety course or researcher try to find

the effective way to share the information using the simple technologies and usable to everyone in the class room. TIGER (*Technology Informatics Guiding Education Reform*) initiatives which began in 2004 when a few nurse/informatics activists attending the first national health information technology summit (McBride, 2011) and topics at the 2010 AMEE e-Learning Symposium which explain e-learning as the collaboration of many kind of activities or an aggregate of digitally-mediated education activities (Ellaway, 2011) become the strong foundation to continue this study. The idea to use social media especially LINE[®] to communicate with student and also a media of learning appeared and has been developed since then. The coordinator brings hopes that the student can learn better anytime, everywhere and in every situation they have. So, the process of learning can flow in every student life and become a good habit in the life time.

RESEARCH METHOD

The method to do this study was based on ASSURE model and it will act as a guidance in performance. This model is attributed to Heinich, Molenda, Russell, and Samldino from *Instructional Media and Technologies for Learning* (Aziz, 1999). The complete information about this can be found in ASSURE model Matrix Table. 1 (Appendix).

1. Analysis learner

Sample or participants on this research were students of nursing in STIKES Suaka Insan Banjarmasin, Diploma (DIII) of nursing, semester II. Total of participants were 19 students from 31 students in semester II, diploma of nursing who enrolled in patient safety course. The participants were they who have and used LINE[®] in his/her phone or gadget.

2. State objectives

The objectives for this study was focused in the subtopic of patient safety. It was the topics about "Communication between health professional in the context of patient safety". The objectives divided into two parts based on Abarquez (2010). First is general objectives and second is specific objectives.

3. Select Methods, Media, and Material

The method for this study was distance learning or online learning. It acts as the complement learning or additional learning

besides of main learning process in the class or school. Media of learning for this study was based on online media. It divided into two parts. First is software, in here was LINE[®]. Second is hardware, in here were phone/gadget and laptop as a hardware. Material for this study came from various resources, such as module in patient safety and additional information from journals, pictures and videos.

4. Utilize Media, Materials, and Methods

It had been done by 5Ps. They are preview material, prepare the materials, prepare the environment, prepare the learners, and provide the learning experiences. The LINE[®] group as part of the learning process was developed by the student and also coordinator of learning. Every day in the 10 days learning, the coordinator would post something that related with the topics of learning and ask student to give the opinion. Students also had been asked by the coordinator to tell the story or something that related with the topics and share it into group. Two teachers were assigned as coordinator. One is in Indonesia and the other in the Philippines.

5. Require Learner Participation

The students participated in the discussion using LINE[®]. There is no time bound to these activities. But, coordinator had assigned contract with student before to always give the respond related to topics which coordinator posted.

6. Evaluate & Revise

The evaluation of the program conducted by the coordinator of learning using interview one by one and using LINE[®] as communication media. The evaluation was divided in to three parts. They were student Performance, media effectiveness and instructor performance. Hence, each student will have their code name and it helped in the analysis data section.

RESULT

Nineteen students participate in this study but only 18 students stay in the program until finish. One student decided to end the contract in the last day of the program. The analysis learner started at February 2016. Continue with choosing topics for study and developed the specific ASSURE model at March 2016. After the program finish, the finding for this study are describe as below.

1. Student performance

Students still acted as students who wait the information just from the teachers. They gave the best respond in the first day of the activity but decreased the appearance and involvement in the next day of activity. Total amount of active students in the group were 5 students and just 2 students who continuously gave responds from 19 students who participate in the group. Besides that, all the students read and opened the message continuously from coordinator.

From the interview section, the Students admitted that they have difficulties to follow the online learning activity. The reason was come from their self.

"...sebenarnya saya mau nanya tapi bingung nanya apa bu" (Translation: "...the truth is I am confusing, I do not know what I want to ask")

(D_3)

"...yang perlu ditingkat mungkin dari kami sendiri bu biar lebih aktif lagi..." (Translation: "...we must increase our activity in online learning.") (F_8)

2. Media effectiveness

One by one interview had completed by the coordinator to find the respond from the students. Most of them agreed about online learning using LINE but there were few students who gave different response.

"...ini merupakan pembelajaran yang sangat membantu..." (Translation: "...This is a learning activity which truly help...") (K_12)

"Bermanfaat bu, dapat banyak info baik dari ibu atau pun teman-teman" (It has benefit Ma'am, I can get many information from Ma'am and other friends...) (F_8)

Few students did not like and agree with the online learning because of the various reason. One of the reason was because they prefer to learn face to face than online learning. Another was because the online learning did not give them fast information when they desperadly need it.

"...tapi sayangnya ada beberapa orang yang gak senang dgn cara belajar online ini..." (Translation: "...But there are some students who do not like this online learning activity...") (K_12)

"...saya lebih suka belajar tatap muka bu, karena lebih berasa dan mudah paham" (Translation: "...I prefer learning face to face Ma'am, because I can feel it and it easy to understand") (A_1)

"Bagus sih..tapi membalasnya perlu waktu .." (Translation: "It was good, but it stills need more time to replay..") (H_9).

3. Instructor performance

In this study, teacher or coordinator was try not act as a source of information but more as a facilitator of discussion among students. But, the fact was coordinators spend more time to become main resources of the information. For all the conversation, teachers dominate the conversation among students.

"...pembelajaran ini sangat membantu, apalagi kalo yg ngajar dari luar, semoga ibu memaklumi..." (Translation: "...This learning activity is helping, otherwise the teacher is from outside, I hope you will understand...") (K_12).

DISCUSSION

We are no longer living in a traditional society. We are living in a digital society and technology provides us with tools that we use in our daily lives. The Internet has changed the way we think and, not surprisingly, the way we learn especially in nursing education. Inserting social media as a media and tools to learn nursing topics is not a new thing in nursing education process. In the United States, the TIGER competencies and educational initiative; American Nurses Association (ANA) social media toolkit; and nursing informatics toolkit developed by the National League for Nursing (NLN) assist educators in developing nursing informatics courses that include social media content such as blogging or engagement through a medium such as Facebook@ (Schmitt, 2012). The same situation can be found in Canada, the Registered Nurses Association of Ontario (RNAO) released a faculty eHealth toolkit to help educators to embed informatics content within undergraduate education. But, long before that Marilyn Anna Ray in her theory about bureaucratic caring has been discussing the same concept (Coffman, 2014).

The reason why nurses work so hard to embed ICT into education is because nurses serve as significant knowledge brokers within healthcare systems, among healthcare disciplines, and with patients, families, and communities. Otherwise, the rapid growth of technology has kept nursing and other healthcare disciplines scrambling to keep pace for example the economic changes such as free trade era. Schmitt, (2012) wrote that technology

becomes a medium through which educators can instruct and students can learn faster and develop the competencies needed.

The students in STIKES SuakaInsan who are the participants have their own generation of learning. They now have changed and be part of the generation 'why?'. This group learns at a rapid pace and comfortable with innovation, expects learning to have a creative side, and advocates for their own learning needs. They learn and lives at one with technology and generally embraces group work (Herrman, 2016). One study shows that Medical students in Nepal, like the participants were using mobile phone as a tool to achieve informal education in a very short time. They used Google and so on (Pimmer, Linxen, Grohbiel, Jha, & Burg, 2013). But, the study shows different result. Most of the students did not show active participation in the project, they tend to be shy and just acted like observers or watcher. The possible reason for that is because they are not used to learn by online learning. As mention before, this is the first time they learnt something with lecturer in online platform. It stills need more trial and learning to make them use Apps not only as social communication only but also a media to learn.

In this study, LINE[®] had chosen as an app to did the research. LINE[®] is coming from LINE Corporation which based in Japan. It launched in June 2011, and actively pushed for the further expansion of the service on a global scale, as well as accelerating the development of LINE as a platform (Line, 2016). There are many menus in LINE which can be used as media of learning, such as Group LINE and privacy order. Students agreed that LINE can be used as media of learning but it still have limitation especially in time management. To solve this, maybe in the future learning process, teacher can develop a precise time to conduct the learning activities. So, every student can get the responds in exact time and decrease the complaint about it. Students also find that they prefer to choose face to face learning in the class. It is normal because they can get the feedback of learning immediately. To consider, Interaction like this can be develop by using Skype[®] or Google Hangout as a media of learning.

In the other side, Teacher as coordinator and facilitator did overload participation. They cover up all the topics and interaction. This

was happened because many factors, such as lack of student participation and misunderstanding function of the teacher in the group. Reduce the teacher participation needs more time and many trial. Teacher should be engaging with student and develop the trust relationship with them. So, hopefully with this way, student can participate actively in the group discussion.

CONCLUSION

LINE[®] as part of the social communication media can be used as one of the media of learning in the distance learning process. Even tough students still had low response and being shy, this media has the advantage to increase students understanding somehow. Students also prefer to use traditional lecture, face to face and complain about long waiting time. Overall, the media still needs high commitment from both students and teachers to continue the process of learning until they get the result done.

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THE COMPARATIVE OF KNOWLEDGE AND ELDERLY PEOPLE'S VISITING AT POSYANDU (CENTRE FOR HEALTH AT THE NEIGHBORHOOD) IN DUSUN SIDOWARAS AND DUSUN BELUT (The study at region work of Mayangan public health centre Jombang)

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ABSTRACT

Introduction: The increasing amount of elderly people will influence to word many aspects of life including physical, mental, psyc-social and economic area. Dusun Sidowaras of Sumbermulyo has a group of elderly people which become the pilot project of faculty of health of UNIPDU Jombang. In this village, there are 230 elderly people in 2011 while 17% of them perform actively who joint in health activity. This research aims at know the comparative of knowledge and elderly people's visiting at Posyandu (centre for health at the neighborhood) in dusun Sidowaras of Sumbermulyo village and dusun Belut Belut of Ngumpul village Jogoroto district Jombang. **Method:** This research use comparative study. The population are 415 elderly people in Sdiowaras and Belut. This research sample is 203 people by using proportional random sampling. This data collection sample uses quetionnaire and checklyst. The data analysed use T Test independent. **Results:** The analysist resulth shows the comparative between elderly people knowledge in health activity in dusun Sidowaras and Belut ($\alpha = 0,000$), and the comparative between their visiting at Posyandu (centre for health at the neighborhood) dusun Sidowaras and Belut ($\alpha = 0,000$). This result identifies there is comparative between them. **Discussion:** From the whole description above, the writer came to the conclusion that there is a way in increasing elderly people's activity to motivate them in going in Posyandu (centre for health at the neighborhood) dusun Sidowaras and Belut.

Key words : *knowledge, visiting, and elderly people group*

THE EFFECT OF RANGE OF MOTION EXERCISE AT LOWER LIMB TO ELDERLY POSTURAL BALANCE IN POSYANDU ALAMANDA 99 JEMBER LOR VILLAGE JEMBER DISTRICT

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ABSTRACT

Background: Elderly with imbalance is one of the occurrence falls that lead to injury. Range of motion exercises is a cycle activity that improve the function of the limb and mobilization. This study aimed to the effect of range of motion exercise at lower limb to elderly postural balance in Posyandu Alamanda 99 Jember lor Village District Jember. **Methodology:** The design of this study was pre experimental, 16 elderly over 60 years as sample of this study by taking simple random sampling technique. Postural balance assessment done every sunday for three weeks. Analysis of the data using ANOVA test. **Result:** The results of data analysis showed p value of 0.002 means there was a significant increased in the value of body balance after active range of motion exercise at lower limb. The result of Post Hoc Test showed an increase in the average balance value of the most significant after 3 weeks of exercising. **Conclusion:** Advice of the results study are range of motion exercises at lower limb can be performed in the elderly among community and can be taught through elderly activities in integrated health service post.

Keywords: *Range of motion exercise, postural balance, elderly*

INTRODUCTION

The main objective is to maintain the elderly health care elderly to be independent in a safe environment. One of the problems of nursing is to prevent accidents, injury, or other trauma and prevent the spread of infection and to maintain good body mechanics and prevent and repair the deformity (Potter, P.A. & Perry, A.G, 2005). Safety and security for the elderly is a necessity that is as important as the basic physiological needs, such as food and water (Stocklager, Jaime & Schaeffer, Liz, 2008). Elderly decreased muscle arrangement so that a decrease in strength and muscle contraction, elasticity and flexibility of muscles, as well as the speed and reaction time.

Decline in function and decreased muscle strength will lead to a decrease in the ability to maintain postural balance or the balance of the body of the elderly thus increasing the risk of falls in the elderly. Fall and its consequences is a major health problem in the elderly population (Sturnieks DL *et all*, 2008) . 31% - 48% of elderly falls due to impaired balance (Sigit, 2005). WHO study Bearo in Central Java to the 1203 population of elderly people over 60 years to get the incidence fell by 2.5% (Kusdiantomo S& Stefanie, 2006).

East Java Province in 2008 was the province with the second in Indonesia with the highest number of elderly people is 3.2 million after the Yogyakarta Province (Yayasan Gerontologi Abiyos, 2009). Jember is a regency in East Java which has the second highest number of elderly after Malang (Nalindra Prima,2010). The number of elderly in Jember is 128 485 elderly people with information to as many as 70 561 elderly elderly women and elderly men as much as 57 924 elderly (Dinas Kesehatan Kabupaten Jember, 2011).

Puskesmas Patrang a health center which has the highest number of elderly is 7,871. Results of preliminary studies on get that village Jember Lor Posyandu the elderly active IHC IHC 99. Alamanda Alamanda have data members each month. IHC Alamanda 99 is Posyandu are active and have a number of elderly as much as 208 (Dinas Kesehatan Kabupaten Jember, 2011). Based on the statement of midwives and cadres responsible member of IHC elderly get the most health problems are hypertension and complaints stiffness in the lower extremities, there are 5 people who've fallen elderly (Posyandu Alamanda 99, 2013.).

Risk of falling incidence can be reduced by improving the balance (Singh, M. A. F, 2000). Physiology of the most important in maintaining the balance is proprioception. Proprioception is the ability to sense the position of the joints or body parts in motion (Brown, S.P., Miller, W.C., & Eason, J.M, 2006). Part responsible for proprioception are generally located in the joints, tendons, ligaments and joint capsule while the pressure sensitive receptors located on the fascia and skin (Riemann, B.L. & Lephart, S.M, 2002). Range of motion exercises are exercises in the joints with the aim of increasing the range of motion, improve muscle tone and prevent joint stiffness. In addition to muscle strength, joint motion also improve balance (Kyung Bok, Soo. Heon Lee, Tae. Sook Lee,Sang, 2013). Based on their analysis, researchers interested in conducting research on the influence of lower extremity range of motion exercises to balance the body's elderly Posyandu Village Alamanda 99 Jember lor Jember.

METHOD

This study uses a pre experimental design by using the One Group Pre-test Post-test Design. The population in this study were elderly members of Posyandu Alamanda 99 lor Jember Regency Village over the age of 60-80 years amounted to 57 people. The sampling technique using simple random sampling technique.

Sampling is done on elderly people who meet the criteria for inclusion and exclusion criteria of 16 people. The inclusion criteria of this study are elderly aged 60-80 years, and willing to become respondents research by completing the informed consent sheet. The exclusion criteria of this study is a stress fracture, joint injury, and muscle injuries have vision and vestibular problems and had a history of heart problems and respiratory problems, as well as elderly people with contractures were not caused by complications of a stroke, for example burns, bursitis, tendinitis.

This research was conducted in the village of Jember lor Jember Regency, held in March 2014 through May 2014. Data collection tool used in this study is the assessment sheet Tinneti body balance test with the value range of 0 to 28 and a blood pressure cuff mercury sphygmomanometer in units mmHg. Processing and analysis of data

by SPSS using ANOVA statistical test with a confidence level of 95% ($\alpha = 0.05$).

RESULT

Characteristics Of The Elderly

The results of the analysis of the characteristics of the elderly describe the distribution of the elderly by age, sex, blood pressure, ethnicity and employment of the elderly. These characteristics relating to matters that affect range of motion, indications and contraindications of the lower extremity range of motion exercises.

Table 1. Average Elderly by Age And Blood Pressure In *Posyandu Alamanda 99 Jember Lor* village

Variabel	Mean	Standard Deviation	Minimum	Maximum	95% CI
Age	65,31	3,57	60 - 73	63,41 - 67,22	
Systolic Blood Pressure (mmHg)	131,88	10,46	110 - 150	126,30 - 137,45	
Diastolic Blood Pressure (mmHg)	82,50	7,74	70 - 90	78,37 - 86,62	

Table 1 illustrates the distribution of the elderly by age, found the average age is 65.31 years old and the elderly are at the youngest age range is 60 years old and the oldest was 73 years old. Unknown interval estimate obtained 95% believed that the average age of the elderly was 63.41 years to 67.22 years, meaning that most of the elderly people who follow the practice is elderly aged between 63 years to 67 years.

Table 1 illustrates the results of a blood pressure measurement prior to the elderly lower extremity range of motion exercises. The measurement results discovered that the average blood pressure of elderly is 131.88 mm Hg in systolic pressure and 82.50 mmHg, the average blood pressure within normal range. Minimum and maximum values of blood pressure is a systolic pressure of 110-150 mmHg and 70-90 mmHg in diastolic pressure,

the minimum and maximum pressure range indicates the blood pressure is in the range of normal to high blood pressure degree 2 so that the elderly can be given lower extremity range of motion exercises appropriate indications and contraindications lower extremity range of motion exercises.

Table 2. Frequency Distribution of the Elderly by Gender, Ethnicity, And Work In IHC Alamanda 99 Jember Lor village Jember

Variabel	Frequence (Peoples)	Percentage (%)
a. Gender		
1. Male	4	25,00
2. Female	12	75,00
Total	16	100,00
b. Ethnicity		
1. Java	5	31,20
2. Madura	11	68,80
Total	16	100,00
c. Occupation		
1. No Work	10	62,50
2. Entepreneur	4	25,00
3. Teacher	1	6,25
4. Janitor	1	6,25
Total	16	100,00

Table 2 illustrates the frequency distribution of gender, ethnicity, and

Tabel 3. Rerata Nilai Keseimbangan Lansia Di Posyandu Alamanda 99 Kelurahan Jember Lor Kabupaten Jember

Variabel	Mean	Standart Deviat ion	Standa	Minimu	95% CI
			m-	Maxim um	
Pretest	22,18	2,13	19-25	21,04-23,32	
1 st Week	22,50	1,96	19-25	21,45-23,54	
2 nd Week	22,81	1,60	20-25	21,95-23,66	
3 rd Week	24,62	1,58	22-27	23,77-25,47	

occupation. Characteristics of elderly people who follow the lower extremity range of motion exercises are the majority of the elderly is a woman 12 people (75%). The majority are ethnic Madurese many as 11 people (68.8%), and distribution of predominantly elderly seniors who are not working as many as 10 people (62.5%).

In addition to the tribe of Madura, there are other parts of Java elderly. Most of the elderly is also still working with this type of work are teachers, janitors, and entepreneur.

Elderly Body Balance Values Before and After Exercise Range of motion of lower extremity

Table 4 shows the distribution of the balance value of the elderly body before exercise had an average of 22.18, meaning that the risk of falls being categorized. The highest body balance value is 25. The balance of the body of the elderly mostly elderly have a balance value between 21 and 23, this range includes the category of moderate risk of falling.

Table 5 illustrates the distribution of respondents value balance of the body during exercise active range of motion of the lower limb, had an average balance of the body week 1 to week 3. Results after 1 week training obtained an average value of the balance of 22.50. Most are on the equilibrium value of 21 to 23, this value is included in the category of moderate falls.

Results of workout two weeks is obtained an average value of the balance of 22.81. Most are on the equilibrium value 22 to 24, this value is included in the category of moderate risk of falling.

Exercise for 3 weeks obtained an average value of the balance of 24.62. Most are on the equilibrium value of 24 to 25, the value is included in the category of low risk of falling.

Comparison of Average Value Balance Body Before And After Exercise Lower Extremity Range of Motion

Table 4 illustrates the comparison of the average value of the balance of the body after exercise 1 week, 2 weeks, and 3 weeks. Based on the comparison p value, known p value of the equilibrium value of exercise 1 week and 2-week exercise does not have a sig. (F statistically) significant. Sig. (F statistically) significant resulting in training after three weeks, p value the 3rd week of the pretest 0,007, week 1 amounted to 0,030 and the 2nd week of 0.109.

Table 4. Test Results Bonferroni Post Hoc Test Value Balance From Pretest To 3 Weeks Exercise Range of Motion In

IHC Alamanda 99 Jember Lor village
Jember

Variabel	Durations	Diferrence Mean	P value
Pretest	1 Week	-.31250	1.000
	2 Weeks	-.62500	1.000
	3 Weeks	-2.18750*	.007
1 st Week	Pretest	.31250	1.000
	2 Weeks	-.31250	1.000
	3 Weeks	-1.87500*	.030
2 nd Week	Pretest	.62500	1.000
	1 Weeks	.31250	1.000
	3 Weeks	- 1.56250	.109
3 rd Week	Pretest	2.18750*	.007
	1 Week	1.87500*	.030
	2 Weeks	1.56250	.109

Discussion

Characteristics of the Elderly Members IHC Alamanda 99 Jember Lor village Jember

Factors affecting Range Of Motion are age, gender, culture and activity (Rubenstein, Laurence Z. & Josephson, Karen R, 2006). Based on the characteristics of the respondent discovered that the average age of respondents was 65.31 years of age, meaning that on average respondents in the elderly undergoing degeneration, one condition of the joints and muscles. Genesis falls identified as a problem that occurs in the elderly. Based on the findings in the United States, deaths due to falls occur in 13% of the population age 65 years, suggesting a syndrome geriatric primary, by 40% in this age group who live in the house will fall at least once each year, and 1 in 40 of them will enter hospitalisasi (Pudjiastuti, 2003).

Characteristics of respondents who mostly do not work as many as 10 people (62.5%) can describe the condition describe the activities of the elderly less maximizes range of motion than the elderly who are still actively working. Muscles that are rarely trained will atrophy, especially in the elderly undergoing degeneration in the muscular system. Elderly decreased muscle arrangement so that a decrease in strength and muscle contraction, elasticity and flexibility of

muscles, as well as the speed and reaction time. The impact of changes in the composition of the muscles can reduce muscle strength (Petrella RJ, Chudyk A, 2008).

Most of the elderly are as many as 12 elderly women (75%). Gender affects the range of motion. Women have better elasticity joints than men. However, women after menopause bone demineralization because of a decrease in the hormone oxytocin. Bone demineralization results in women more difficult to maintain a good posture, making it more at risk for falls.

Active range of motion exercises that do the elderly can be done independently of the elderly who do not have heart disease, lung, and bone and muscular systems. Based on the research results can be noted that elderly blood pressure average is 131.88 mm Hg in systolic pressure and 82.50 mmHg, the average blood pressure within normal degree. The maximum value of the systolic blood pressure is 150 mmHg and 90 mmHg in diastolic pressure, the maximum blood pressure is in the range of type 2 high blood pressure, so it is still within the limits that can perform range of motion exercises.

Body Balance Value Seniors Before Exercise Lower Extremity Range of Motion

Ability to maintain posture and the ability to mobilize a coordinated series of muscle function and bone, balance adjustment function, and the nervous system. With age, the elderly decreased function in maintaining posture and ability to mobilize. The resulting decline in the function of the elderly have a value of body balance and gait suboptimal so has the risk of falling.

The result showed the elderly body balance value 22.18, the lowest value of the balance owned by the elderly is 19 and the highest value that is owned elderly is 25. Based on the value category Tinneti test, the average value of 22.18 belonging to the risk of falling levels of being. Value 19 is the lowest body balance the body's equilibrium value in the elderly who are at the age of 70 years or more. Body balance value of Tinneti test obtained from elderly body balance when the body is still and assessment of gait.

The results of this study indicate that the elderly have a moderate risk of falling. The risk of falling is being able to relate to the characteristics of the elderly who have an

average age of 65.31 years. Age 65 years in the levels of age decreased ability to maintain body balance. Most of the elderly as many as 10 people (62.5%) is the elderly who are not working, meaning that most of the elderly have less activity levels in moving the limbs that can improve reduction in limb function such as muscle atrophy, decreased joint lubrication, joint stiffness, and penurnan nerve function in the extremities elderly. The sex ratio showed that most of the elderly are women 12 people (75%). Women in elderly demineralized bone is greater than men, this is caused due to a decrease in estrogen and progesterone. Demineralization of bone in women causes women more likely to have decreased function of the body mechanics and posture thus maintain influence in maintaining the balance of the body.

Body Balance Value Seniors Exercise Range of Motion After the Lower Extremities

The results of the study during a three-week active range of motion exercises of the extremities known elderly p value of 0.006. Results 0,006 p value <0.05 means Ho rejected, shows that there are differences in the average value of the body's balance of exercise week 1, week 2, and week 3. Active range of motion exercises of the lower limb elderly provide changes in the balance of the body during exercise elderly 3 weeks. There are differences in the average value of the body balance of elderly every week.

Physiology of the most important in maintaining the balance is proprioception. Proprioception is the ability to sense the position of the joints or body parts in motion (Brown, S.P., Miller, W.C., & Eason, J.M, 2006). Part responsible for proprioception are generally located in the joints, tendons, ligaments and joint capsule while the pressure sensitive receptors located on the fascia and skin (Riemann, B.L. & Lephart, S.M, 2002).

Range of motion exercises are exercises in the joints with the aim of increasing the range of motion, improve muscle tone and prevent joint stiffness. Through active range of motion exercises for the elderly is expected to stimulate proprioception optimally. Through active range of motion exercises in the elderly is expected to improve function in the extremities elderly, both on the system and the system joints integument. Maximize joint function is

expected to improve the conduction of nerve impulses through mechanoresptor.

Body Balance Difference Analysis Values Elderly Before and After Exercise Range of Motion Active Lower Extremities

Aging causes changes in the muscle cells actually reduce muscle mass. Loss of muscle mass is referred to as sarcopenia. Adverse effects of aging on muscle has been shown to be controlled or even reversed with regular exercise. Importantly, exercise also improves the connective tissue surrounding muscle tissue utilizing, thus becoming the most beneficial for injury prevention and physical rehabilitation therapy.

Exercise is recommended for the balance of the body is exercise that increases muscle strength. Sizes for structural adaptation in the elderly are the same as in young people [18]. Adaptation of the structure of muscle in the elderly after exercise there is an increase in both protein synthesis and contractile elements.

Exercise can increase muscle strength, which in turn will improve postural balance of the elderly can be done 3-4 weeks of training with a frequency of three times a week [19]. After the active range of motion exercises of the lower limb down, the average value of the balance of the body's first week after the workout is 22.50. This value increases from the body before exercise keseimbangan value of 22.18, but this increase is not significant and is still in the category of moderate risk of falling.

Results of the second week of the exercise shows the value 22.81, the value showed an increase that was not significant. Changes in the average value of the most significant body keseimbangan obtained after the third week of training with body balance value 24.62. Changes in the average value of the balance of the body after practicing for three weeks showed the value of the balance of the body including the low risk category falls. Low falling categories showed an average improvement of body balance value of prior active range of motion exercises.

Range of motion exercises to develop motor coordination skills and aktifitas functionally and give feedback on the sensory nerves of contraction. So with range of motion exercises are routinely trained sensory receptors in the response of the entire surface of the muscle, skin, joint capsule and ligaments to stimulate the formation of proprioception.

Through increased training of the muscles, joints, and ligaments it will increase sensorimotor that will improve proprioception, with increased proprioception it will affect the increase in the balance of the body.

The results also showed an increase in the average number of elderly body balance after week 1 to week-3 drills. Comparison of the standard deviation week 1 1.96, week 2 of 1.60, and the 3rd week of 1.58 indicates an increase in the average weekly basis, but decreased from a mean increase range. These results may indicate that there are certain exercises that long average increase will be at a smallest value until it reaches a turning point where there is no increase in the average value of the balance of the body.

Lower extremity range of motion exercises can be done in the long-term training program. Although there is no increase in the value of balance, lower extremity range of motion exercises can be done to prevent deformity. Elderly require regular exercise to slow down the body deformity due to degeneration of the body cells.

Conclusions

Characteristic of respondents in this study consists of: the average age of respondents was 65.31 years, women made up 12 people (75%), most of the Madurese as many as 11 people (68.8%), with an average blood pressure 131.88 mmHg in systolic pressure and 82.50 mmHg in diastolic pressure, as well as more than half of the respondents do not work as many as 10 people (62.5%). The average assessment body balance of elderly before the lower extremity range of motion exercises is 22.18, meaning elderly group is still in the category of moderate risk of falling. The average assessment body balance after exercise three weeks was 24.62, which means that older people are included in the category of low risk of falling. The results of the analysis of data obtained p value = 0.002, meaning that there is a difference in the value of the balance of the body before and after exercise. Increasing the value of the most significant body balance obtained after training for 3 weeks so there is the effect of the active range of motion exercises to balance the body's lower extremities elderly after 3 weeks of training.

Suggestion

Lower extremity range of motion exercises can be used as a routine exercise injury prevention by the elderly, can be taught by health professionals, especially cadres Posyandu, and extremity range of motion exercises can be taught in the family, especially families who have family members who are elderly.

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THE RELATIONSHIP OF COGNITIVE STATUS AND QUALITY OF LIFE OF ELDERLY IN NURSING HOME

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ABSTRACT

Introduction: The increasing of life expectancy cause the number of elderly population in the world also increases. The quality of life of elderly as important aspect should be aware by health provider. One of the factors that affect the quality of life is cognitive status. The purpose of this study was to determine the relationship of cognitive status and quality of life of elderly in nursing home. **Method:** The research was analytic survey with cross sectional study approach. Population was the elderly who stay at nursing home. The numbers of participants were 52 elderly taken by simple random sampling technique. Data were analyzed using descriptive statistics as frequency distribution and chi square test. **Results:** The results showed 71.2% of elderly with sufficient quality of life, 82.7% of elderly with normal cognitive status and there was relationship of cognitive status of elderly with their quality of life. **Discussion:** Based on the result of this study can be concluded that the increasing of cognitive status will be followed by improvement of quality of life of the elderly. Therefore, the recommendation to the leadership and employees of nursing home especially health provider to design the activities that are able to encourage the elderly cognitive status in order to enhance the quality of life of the elderly. It can be by providing facilities such as exercise equipments, reading sources such as newspapers and other brain exercises activities.

Key words: Quality Of Life, Cognitive status, Elderly

INTRODUCTION

The Indonesia government's success in the national sustainable development brings positive impact on the welfare of the community especially in the health sector. The positive impact of this condition caused the increasing of life expectancy. Increased life expectancy led to increasing the number of elderly population annually. The number of elderly population are increasing annually (Gitahafas, 2011).

Currently, the number of elderly is estimated that more than 625 million people (one in 10 people over the age of 60 years) worldwide. In 2025, the elderly will reach 1.2 billion. In 2020, Indonesia is predicted as one of country with huge elderly population beside China, India and United State with life expectancy above 70 years old (Nugroho, 2012). Based on data between 2013-2014 in Kota Padang, West Sumatera, there were 81,938 people who were above 60 years old (DKK Padang, 2013).

The primary impact of the increasing elderly population are increasing their dependency. The dependency of elderly caused by decreasing of physical, psychics, and their

social ability. Every elderly is expected to have good quality of life in order to support them as independent population and to reduce their dependent rate (Yuliati, Baroya & Ririanty 2014). World Health Organization (WHO) stated that quality of Life have four domain including physic health, psychics health, social and environments (WHO, 2008).

Study by Yuliati, Baroya & Ririanty (2014) showed that about 17.1% of elderly in nursing home with bad quality of life and 32.9% of them with good quality of life. Study by Supraba (2015) found that 64.58% of elderly had bad quality of life and 41.67% had good quality of life.

The frequent problem are faced by elderly is decreasing of their functional body systems which are caused change of its structure and function including brain (Bandiyah, 2009). The change of cognitive function is one impact by brain change (Sarwono, 2010).

The change of cognitive function absolutely give effect for elderly life. Surprenant & Neath (2007) showed that the cognitive function change was associated and at the end influenced quality of life of elderly.

Fitriani (2014) found that there was relationship between cognitive status and quality of life.

The primary survey in Sabai Nan Aluih nursing home have found that there are 10 elderly consist of 64.54% male and 36.45% female. The average age was above 60 years old. Thought this survey also found that among 10 elderly, 20% of them had god quality of life and 80% them had bad quality of life. The result of interview using Mini Mental Status Examination (MMSE) showed that among 10 elderly, 90% of elderly with normal cognitive function and 10% of them with impaired cognitive function.

Based on this background, The purpose of this study was to determine the relationship of cognitive status and quality of life of elderly in nursing home.

RESEARCH METHOD

The research was analytic survey with cross sectional study approach. The population of this study were elderly who were above 60 years old in Sabai Nan Aluih nursing home. The number of participants were 52 elderly taken by simple random sampling technique. There were two instruments that were used in this study as Mini Mental State Examination (MMSE) and *WHOQoL – BREF*. Data were analyzed using descriptive statistics as frequency distribution and chi square test.

RESULT

Table 1 Descriptive Statistics of Quality of Life of Elderly in Nursing Home

Quality of Life of Elderly		
Categories	N	%
Good	10	19.2
Moderate	37	71.2
Less	5	9.6
Total	52	100

Table 2 Descriptive Statistics of Cognitive Status of Elderly in Nursing Home

Cognitive Status of Elderly		
Categories	N	%
Normal	43	82.7
Impairment	9	17.3
Total	52	100

Most of elderly (71.2%) had moderate quality of life (Table 1). Most of elderly (82.7%) had normal cognitive status (Table 2). Based on chi square test was found that there was relationship of cognitive status of elderly with their quality of life (tabel 3).

Table 3 Tabulation of quality of life and cognitive status of elderly

Cognitive Status	Quality of Life						Total
	Good		Moderate		Less		
	n	%	n	%	n	%	
Normal	9	20.9	33	76.7	1	2.3	37
Impairment	1	11.1	4	44.4	4	44.4	36
Total	10		37		5		52

Chi-Square p value =0,001

DISCUSSION

Results of this study found that majority of elderly (71.2%) have moderate quality of life. This result is similar with research conducted by Fitriani (2014) that found majority of elderly (77.76%) have moderate quality of life.

The tendency of the elderly with moderate quality of life can be caused they like to face their problems positively and do not often have negative feelings such as loneliness, despair, anxiety or depression. This is consistent with the theory by Coons & Kaplan in Sarafino (1994) that everyone has a different quality of life depends on them in addressing the problems that happen. If they face positively so they will have better quality of life, but when they face negatively so it cause bad quality of life. It can be seen that 40.4% of elderly do not often experience negative feelings. Elderly are also able to adjust to the environment and to accept all the changes and setbacks they experienced such as the elderly often enjoy life and feel the meaning of his life. This is consistent with the theory Kemp (Karangora, 2012) quality of life is how people assesses their experience entirety with positive or negative. This is supported by the results that 42.3% of elderly often enjoy their life, 51.9% of elderly feel their life has meaning, 59.6% of elderly were able to hang out with friends and 59.6% of elderly said that they were satisfied with their living conditions.

This study also showed that most of elderly (82.7%) had normal cognitive status. The results of this study is similar to results of research conducted by Muzamil, Afriwardi & Martini (2014) showed that majority of elderly (82.4%) have good cognitive status. Most of

elderly have normal cognitive status can be seen that some of elderly still know year, season, date, day, month and they still know where they lives now.

Elderly were also able to remember when the researcher mentions three objects and follow commands sent by the researcher. This is consistent with the statement of the Ministry of Health of Republic of Indonesia (2008) that in order to maintain cognitive function in the elderly, using the brain continually and rested with sleep, activities such as reading, listening to the news and stories through the media it is intended that the brain does not rest continuously.

The results also show that a minority (17.3%) elderly people with cognitive status disorders. It can be seen at all the elderly were not able to concentrate on reducing the numbers and it also related decline in cognitive function in the elderly. Characteristics of respondents by education in this study the majority (88.9%) did not finish school. This is consistent with the theory Myers (2008) education level that has been achieved by elderly can indirectly affect their function of cognitive. Education affects the capacity of the brain, and has an impact on cognitive tests.

The results of this study showed that the proportion of elderly people who had less quality of life were common in the elderly with cognitive impairment (44.4%) than elderly people with normal cognitive status (2.3%). There is a significant relationship between cognitive status and quality of life of elderly. It means that if the elderly have normal cognitive status, the quality of life will also increase. The results of this study are similar with research that was conducted by Fitriani (2014). It showed that there was relationship between cognitive status and quality of life of the elderly.

Based on these results can be concluded that there was a relationship of cognitive status and quality of life of the elderly. It can be seen that the elderly who have less quality of life developing cognitive impairment such as inability to concentrate and ability in aspects of language. Elderly also will experience problems in social life such as the adjustment of the elderly in the environment so that the elderly do not enjoy life and feel meaningless and appear negative feelings such as loneliness, despair, anxiety and depression.

It is caused by physical health problems that would limit seniors to be active in social life.

This is consistent with Gitahafas (2011) stated that elderly with cognitive impairment such as dementia decline in adaptation with environment and start to be confusion or are not able to recognize the place usually occupied as well as experience problems in their social life. It is caused by physical health problems that would limit to move in their social life lead to the onset of the crisis and symptom-psychological symptoms that affect quality of life of the elderly.

The results of this study also were supported by the theory of WHO (2008), impaired cognitive function in elderly people can develop into dementia, can lead the elderly susceptible to interference in the activities of daily living (eating, drinking, dressing, bowel / small, etc.). Elderly with dementia will become dependent in running all the activities because they need to assist by others, the condition can affect functional capacity, psychological and social health and well-being of the elderly, defined as the quality of life (WHO, 2008).

The relationship of cognitive status and quality of life of elderly because the elderly are still full well oriented in time orientation and the orientation of such a place where he now lives. Elderly also always maintain her physical health so that the elderly are able to concentrate on adjusting to a new social life so it does not often experience the negative feelings that make the quality of life of the elderly can be increased.

CONCLUSION

Based on the result of this study can be concluded that the increasing of cognitive status will be followed by improvement of quality of life of the elderly. Therefore, the recommendation to the leadership and employees of nursing home especially health provider to design the activities that are able to encourage the elderly cognitive status in order to enhance the quality of life of the elderly. It can be by providing facilities such as exercise equipments, reading sources such as newspapers and other brain exercises activities.

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SUPPORTIVE THERAPY IN IMPROVING THE INDEPENDENCE OF THE ELDERLY BASED ON OREM'S NURSING THEORY

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ABSTRACT

Introduction: The elderly independence is an attitude without supervision, direction or personal assistance which is still active. This study aims to determine the effect of supportive therapy to the elderly independence. The design of the study was Quasy Experiment Design with Pre-test and post-test design, the population was 16 elderly people in Bhakti Luhur Orphanage Trosobo, Sidoarjo. The sample which was 16 respondents was taken by total sampling. The independent variable of this research was supportive therapy and the dependent variable was self-reliance on elderly. Instrument used Barthel index ADL. Data were analyzed by using the *Wilcoxon signed rank test* with $\alpha = 0.05$. The results showed that after being given supportive therapy in the treatment group of the 8 respondents almost half of them (37.5%) have the independence in the independent category, while the control group of 8 respondents almost half of them (37.5%) have the independence in the category of medium dependence. Data were analyzed by Wilcoxon signed rank test in the treatment group was obtained $P = 0.0014 < \alpha = 0.05$, so H_0 was rejected. In the control group obtained $P = 1.000 > \alpha = 0,05$ so H_0 was accepted, it meant that there was an influence to the respondent groups independence. Supportive therapy affects to the independence of the elderly. Therefore, it is expected for the nursing service should do supportive treatment to enhance the elderly independence.

Key words: supportive therapy, independence, elderly

INTRODUCTION

Aging or becoming old is a condition that occurs in a human life and experience with the physical changes. Probably, the most major characteristic of the aging process is the increasing loss of independence or dependency (Aspiani, Yuli.R, 2014). Nowadays, someone will change little by little, so he/she is not able to perform daily activities independently anymore. The decrease of physical condition as a result of the aging process can influence on the body's resistance to interference or the infection attack from outside. It could encourage the elderly to be able to perform their daily activities independently with support from friends and people nearby. Nursing home is one of the elderly shelters. Elderly, who has long been in the nursing home, has already understood and adapted to daily activities such as having lunch should be gathered in advance and pray before having meals together a week. Elderly, who has newly occupied homes, still does not understand the routine activities. There is also a lazy elderly to do the activity. The ability of elderly to do daily activities or often called by ADL

(Activity of Daily Living) to look the independence of the elderly. It has been identified that the elderly generally suffers various symptoms due to decrease of biological, psychological, social, and economic function (S.Tember & Noorkasiani, 2009). Elderly people independence is the ability of elderly people in performing daily life activities related to functional status of elderly. According to (Suardana, Wayan.I & Ariesta, Y, 2012) in the study of 60 elderly people about "Characteristics of the Elderly people with independence to perform daily activity" in Banjar Den Yen Denpasar, in 2012. It was obtained that 41 people (88%) were classified as independent and 19 people (32%) were classified as mild dependence. Independence of the elderly is affected by age, health, economic and social conditions. The support of surrounding friends and a nurse is obtained by the elderly people while in the nursing home, because they are too far from their family. Giving supportive and self-reliance in the application of Dorothea E. Orem theory is affected by three nursing systems, wholly compensatory system,

partially compensatory system, supportive-educative system (Tomey, Marriner.A & Alligood, Raile.M 2006). Wolly sompensatory system is an independent action of nursing that needs help in the movement, control, and ambulation as well as the movement manipulation. Partially compensatory system is a system in giving partially self-care, action of fulfilling need is performed by nurses partly and by patients themselves partly. Supportive-educative system is a system of assistance given to patients who need to support education in hope that patients are able to perform self-independence. Support from family, friends and the environment in performing daily activity is one part of the supportive-educative system. One of supportive-educative systems is supportive therapy. Supportive therapy is a form of psychotherapy that is widely used in ill family structure ill and community based on psychiatry management (Stuart & Laraia, 2005). The purposes of supportive therapy, namely: to evaluate the client's strengths and weaknesses, help the client to make realistic changes about several things which enable to have better function, to restore and strengthen realistic about several things which enable to have better function, and maintain or reestablish functional level (Kushariyadi & Setyoadi, 2011). Supportive approach aspects, namely: congruent, unconditioned positive rewards, and empathy. Congruent, is the ability to convey to clients that nurses have sincerely concern and respect the client as a man in carrying out their role. Unconditioned positive reward is the delivery to the client that nurses appreciate and assess the client as a human being without differentiating anybody and profession or position. Then, empathy is a sincere effort to understand how the client's feelings and know the ability to deliver understanding to the clients (Kushariyadi & Setyoadi, 2011). Supportive therapy has four sessions, namely: session 1 identify the ability in daily activities and existing support systems, session 2 use the support system inside of the room and the constraints, session 3 use a support system outside of the room and the constraints, session 4 Evaluate the result and the constraints of using supporting source both inside and outside the room (Hernawaty.T & Keksi G. 2011). With the support among friends or people nearby could also affect the elderly

independence to perform daily activities. Supportive therapy is usually called an elderly development, in order to maintain their independence well and positively.

RESEARCH METHODS

This research used a quasy experimental design. The population is all elderly people in Bhakti Luhur Orphanage. The sample was 16 elderly people and the technique used was simple random sampling. The independent variable was supportive system. The dependent variable was independence. The instrument was Barthel Index observation sheet. Data were analyzed by Wilcoxon signed rank test. Data were collected as follows:

- The respondents were divided into two groups: the treatment group (given supportive therapy) and control groups
- Assess the independence level of the elderly before giving supportive therapy to treatment group or the control group.
- The treatment group was given supportive therapy for 3 days, 30 minutes per day, continue to perform routine daily activities.
- The control group only carried out routine daily activities without having supportive therapy
- One week later both groups, treatment and control were re-identified in the level of independence.

RESULT

The research result on the age characteristics divided according to WHO (2006) based on the age showed that from 8 respondents of the control group, almost all (75.0%) is the elderly between 60-74 years old.

Table 1 Distribution of elderly people independence difference of pre-post supportive therapy in the treatment group and elderly people independence difference of pre-post supportive therapy in the control group at Bhakti Luhur Orphanage Trosobo Sidoarjo in June 2015.

No	Independence	Treatment Group				Control Group			
		Pre		Post		Pre		Post	
		N	%	N	%	N	%	N	%
1	Independent	1	12,5	3	37,5	1	12,5	1	12,5
2	Mild Dependent	2	25,0	1	12,5	2	25,0	2	25,0
3	Moderate Dependent	1	12,5	3	37,5	3	37,5	3	37,5
4	Severe Dependent	3	37,5	0	0	1	12,5	1	12,5
5	Total	1	12,5	1	12,5	1	12,5	1	12,5

Total	8	100	8	100	8	100	8	100
P value	0,014				1,000			
<i>Wilcoxon</i>								

Source: Primary Data, June 2015

DISCUSSION

Elderly people independence means an attitude without supervision, direction, or active assistance from others. Self-reliance is the ability or the condition in which an individual is able to take care of his/her own interest or cope it without relying with other people (Zulfajri, 2005). The results showed that the treatment group before being given supportive therapy found nearly half (37.5%) experienced severe dependence, and almost half of the control group the control group the control group (37.5%) had moderate dependency. The elderly dependence or decrease of the elderly independence occurs when they experience with the decline in memory function or have various diseases. Independent means being able to perform all activities independently or without assistance, while the moderate and severe dependence means partly of the elderly people are aided and there are elderly people who can do alone, and the total dependence means that elderly people can no longer afford to carry out the activity or self-activities and therefore need assistance from nurses and their friends. Determining dependence or independence of the elderly can use the Barthel Index, a measurement person's ability to perform daily activities independently or dependently on the elderly. The result of the Barthel Index before giving a supportive therapy on the treatment group, the eating activity was obtained that almost half (37.5%) of the elderly people could carry out the eating activity independently (can take out of the plate and feeds himself/herself) and almost half were not able to do it or dependent on others, for example in taking food and dishes, feeding and etc. While bathing, the majority of them (62.5%) was independent; Self-care the majority (62.5%) independently; in dressing, almost half of them (37.5%) needed help mostly in buttoning his/her shirt and independent elderly; in urinating, entirely of them (100%), there was no interference with urination or regular ; in defecating, majority of them (75.0%) had no disturbance in bowel movements or irregular; in using the toilet, half of them (50.0%) needed help but they could do several things alone by themselves; in

transferring, majority of them (62.5%) needed help to be able to sit helped by two people; in mobility, half of them (50.0%) used wheelchairs; and in going up and down the stairs, half of them (50.0%) were not able to do it. Overall, elderly nearly elderly people were not able to use the toilet like cleaning the toilet after a having a bowel movement or urinating, they could not afford to have mobility because there were a lot of them used wheelchairs, and they were not able to climb the stairs or down stairs. Meanwhile, in transferring or when they moved from bed to chair or wheelchair, most of them needed help to be able to sit helped by two people.

While in the control group, it was obtained that almost half of the elderly people (37.5%) while eating they needed help and they did it independently, in bathing, half of them (50.0%) were dependent on others such as nurses or fellows, in performing personal care, half of them (50.0%) needed help of others or independently, in dressing, half of them (50.0%) needed help, in urinating, entirely of them (100%) had a continence urination (regular), in defecating, half of them (50.0%) sometimes had an incontinence of defecation or constipation (once a week) and continence of defecation (regular), in using the toilet, half of them (50.0%) needed help, but they could do several things by themselves, in transferring, nearly half of them (37.5%) needed help from two people to be able to sit, in mobility, almost half of them (37.5%) used a wheelchair and independently despite using the help of tools such as a stick, in going up and down the stairs, half of them (50.0%) were not able to climb the stairs or down stairs. Overall, they depend to take a bath and need assistance such as in scrubbing their body with soap, drying off with a towel and washing the body with water. While in dressing, they needed help such as buttoning clothes, and inability of them to use the toilet such as cleaning the toilet after taking a bowel movement and urinating and inability of them to go up and down the stairs.

After giving a supportive therapy, the elderly people had an independence change, especially in the treatment group. After giving a supportive therapy, almost half of them (37.5%) had independence in the independence category and in the moderate dependence category, while in the control group was obtained that almost half of them (37.5%) had

the moderate independence category. Elderly dependence means attitude without supervision, direction or personal assistance which is still active. An elderly who refused to perform functions deemed not perform the function, although he/she was considered capable. Usually, it would affected the independence in performing daily activities (Maryam.R. Siti, 2008). Supportive therapy in the treatment groups for the elderly in Bhakti Luhur Orphanage Trosobo Sidoarjo can be seen in the table which shows that from eight respondents of the treatment groups after being given supportive therapy, almost half of them (37.5%) had the independence in the independent category. Based on Wilcoxon Sign Rank test, it was obtained that $P=0,014$ and the value of $\alpha = 0.05$, meant $P < \alpha$ then H_0 was rejected, it meant that supportive therapy influenced on the independence of the elderly in Bhakti Luhur Orphanage Trosobo Sidoarjo. Independence of the elderly people is affected by age, health, economic, and social conditions. The support of friends surrounding them and the nurse are required by the elderly, especially when they are in the nursing home, because they are too far from their family. Supportive therapy is given to the elderly people in this study using the approach of nursing theory by E Dorothea Orem. Based on Orem nursing theory, there are three classifications of nursing system to meet the requirements of the elderly self-care, they are: wholly compensatory system, partly compensatory system and supportive-educative system. Supportive-educative system is a system of aid that is given to the elderly who need to support education in the hopes of patients are able to require self-care. Support from family, friends and the environment in performing daily activities is one part of the supportive-educative systems. One of supportive-educative systems is a supportive therapy. Supportive therapy is psychotherapy form that is widely used in ill family structure and community which is based on the psychiatry management (Stuart & Laraia, 2005). The purposes of supportive therapy, namely: to evaluate the client's strengths and weaknesses, help the client to make realistic changes about several things which enable to have better function, to restore and strengthen realistic about several things which enable to have

better function, and maintain or reestablish functional level (Kushariyadi & Setyoadi, 2011). Supportive approach aspects, namely: congruent, unconditioned positive rewards, and empathy. Congruent, is the ability to convey to clients that nurses have sincerely concern and respect the client as a man in carrying out their role. Unconditioned positive reward is the delivery to the client that nurses appreciate and assess the client as a human being without differentiating anybody and profession or position. Then, empathy is a sincere effort to understand how the client's feelings and know the ability to deliver understanding to the clients (Kushariyadi & Setyoadi, 2011). Supportive therapy has four sessions, namely: session 1 identify the ability in daily activities and existing support systems, session 2 use the support system inside of the room and the constraints, session 3 use a support system outside of the room and the constraints, session 4 Evaluate the result and the constraints of using supporting source both inside and outside the room (Hernawaty.T & Keksi G. 2011).

With the support among friends or people nearby could also affect the elderly independence to perform daily activities. Supportive therapy is usually called an elderly development, in order to maintain their independence well and positively.

CONCLUSIONS AND RECOMMENDATION

Supportive therapy based on Dorothea Orem theory nursing can increase the independence of the elderly by optimizing support among friends or significant others in performing daily activities. Therefore, further qualitative research is needed to complete information about how far the supportive therapy influences on the elderly independence.

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THE EFFECTIVENESS OF REMINISCENCE THERAPY FOR REDUCING DEPRESSIVE SYMPTOMS IN ELDERLY

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ABSTRACT

Introduction: Depression is one of the most common mental disorders with a high prevalence among the elderly. Reminiscence therapy is one of the psychological treatment that specially designed for the elderly to improve their mental health status by recalling and assessing their existing assessing. This aims of this review was to amplify the available evidence of reminiscence therapy in reducing symptoms of depression in elders. **Methods:** Using electronics database as search strategy. This study retrieved evidence from 2340 articles accessed from three databases (including PubMed, Proquest, EBSCO), that limited from 2003 until 2012. After read the abstract, the keywords, and the full text of retrieved articles, finally, 4 articles were selected. **Result and Discussion** This study showed that these studies agreed that the reminiscence therapy can increase the mental health of elderly. Which showed in decreased level of depression scale. so, it can be concluded that reminiscence therapy is effective to reduce depression symptoms.

Key words : Reminiscence Therapy , Depressive symptoms, elderly

INTRODUCTION

The life expectancy of people generally in worldwide is increasing as the advance development of medical technology. (Chiang, et al, 2010). The elderly population with over 65 years old in 2005 was 7.4%, with this number, the population will be projected to increase 16.1% by the year 2050. (UN Population Division, 2009).

Depression becomes one of the increasing concerns along with the rapid growth of the ageing population (Song, et al, 2014; Karam, 2012). This illness is one of the most common psychiatric disorder in elderly (Malony, 1999) However, it is also one of the most underdiagnosed and untreated illnesses in the elderly population, especially in developing countries (Sharif, et al, 2008; Molony, 1999). Once a person is diagnosed with depression, it is more likely that the patient's quality of life is deteriorating. This may refer to poor social function, cognitive deficits, an active daily life, increased medical burdens, and possibly an increased risk of suicide and death (Song, et al, 2014; Chiang et al, 2010). Considering the high prevalence of and potential dangers associated with depression in later life, there is a critical need for effective and low threshold preventive interventions to

decrease depressive symptoms in elderly individuals (Song, et al, 2014).

Psychotherapy has now been concerned as one strategy to minimize the use of pharmacological agents. One of the offered psychotherapy is reminiscence therapy. This intervention is cost-effective and relatively free from harmful effects (Sharif, et al, 2008). The Nursing Interventions Classification (Kim, 2006). defines reminiscence therapy as

“using the recall of past events, feelings, and thoughts to facilitate pleasure, quality of life, or adaptation to present circumstances of self-esteem through confirmation of their uniqueness”. (NIC, 2004)

Reminiscence therapy is basically divided into individual reminiscence and group reminiscence according to the method by which the therapy is conducted (Blake, 2014). Individual reminiscence therapy is normally conducted through face-to-face conversation or individual activities. Group reminiscence is conducted through organized group activities in which elderly patients can achieve identification and a sense of belonging (Song, et al, 2014; Blake, 2014). Yet, besides reminiscence can be effective

and beneficial for mental health of the elderly, still another therapy were needed, such as: logotherapy.

Therefore, study to investigate the effectiveness of reminiscence therapy for reducing depressive symptoms. This paper were examine critically the effectiveness of reminiscence therapy for reducing depressive symptoms

RESEARCH METHOD

Search strategy that used in this study was electronic database search. Using the electronics database from Ebsco, Proquest and Pubmed database. Using combining keywords of Reminiscence therapy, Depression, Eldery. The articles were restrict only for English articles from 2003 to 2012. The 2340 articles were found. Then, 1789 articles were removed for double titles. After read the title, 511 were removed because of unmatched keywords, Finally after read the full text, 4 were selected.

RESULTS AND DISCUSSION

Based on the selected articles, reminiscence therapy is a method of using the memory to protect mental health and improve the depression scores of elderly (Sharif, 2014) Reminiscence is not just to recall the past events or experiences. It is a structured process of systematically reflecting on one's life with a focus on re-evaluation, resolving conflicts from the past, finding meaning in one's life and assessing former adaptive coping responses the last several decades, increasing studies indicated that reminiscence therapy is effective for the elderly with depression (Sharif, 2014; Chiang, et al, 2010; Chen, et al, 2012; Jones, 2003) Reminiscence therapy would improved socialization, induced feelings of accomplishment in participants, and assisted to ameliorate depression (Chiang, et al, 2010)

Although many other treatment that to reduce depression, This study were reviewed that most of the research indicate reduction in depression with reminiscence therapy This intervention can be recommended for nursing to decrease the depression.

The treatment is the most cheapest among others. Because there's no need to pay much to do this treatment. Therefore it is very suitable for the elderly who decline in cognitive and other functions. an alternative non-pharmacological therapy that is effective to

reduce the depressive symptoms and improve the living quality of potential large older.

SUMMARY

The available evidence reviewed indicate that reminiscence therapy is effective to reduce depression symptoms of elders participated in the four articles. Reminiscence therapy can be offered as a alternative care-delivering strategy for elderly. However, to ensure that reminiscence therapy is effective in various settings that are related to older adults, nurses must consider the specific values and experiences of older people in a specific cultural group. Nurses are needed to evaluate and design interventions targeting the mental health needs of older adults, especially those residing in long-term care facilities. Consequently, it seems plausible that strategies for enriching the lives of elderly people are crucial, and that reminiscence offers a method of promoting healthy ageing.

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MOSLEM SPIRITUAL BEHAVIOUR AND READINESS TO FACE DEATH IN ELDERLY

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ABSTRACT

Introduction: Elderly will experience deterioration in physical / biological and psychological conditions, and changes in social conditions. One characteristic of this phase, usually elderly contemplate the nature of life with more intensive and tried to get closer to the Lord. In the amendment, the elderly often considers that all physical abilities decline is a serious disaster because it was close to death. The purpose of this study was to determine the relationship with the Muslim spiritual attitude of readiness to face death in the elderly. **Method:** This study design was analytic correlational with cross sectional approach. Elderly population in UPTD Griya Werdha was 39 elderly, 35 elderly were selected using simple random sampling. Independent variable was Moslem spiritual behavior and the dependent variable was readiness to face death. The data was collected using questionnaire and was analyzed by Rank Spearman test. **Results:** The results of the study were mostly spiritual less-behaved on the level less and not prepared (80%) and a small part of spiritual well-behaved and were not prepared (20%). The results of Spearman Rank correlation test statistic showed $P < \alpha$ ($0.01 < 0.05$). **Discussion:** The results showed, there is a relationship between spiritual behaviour with the readiness of face death in the Elderly at Griya UPTD Werdha Surabaya. In sum, expected to be material in terms of the evaluation as well fostering self-awareness about yourself approach to almighty God.

Key words: moslem spiritual behaviour, readiness to face death, elderly

INTRODUCTION

Generally, Elderly experience a variety of symptoms due to decreased function of biological, psychological, social, and economic. Tamher & Noorkasiani (2009) identify that this change will affect all aspects of life, including health. y that (Puspita, 2014). In the amendment, the elderly often considers that all physical abilities decline is a serious disaster because it was close to death. Pressman (1990) identify that elderly strong religious and religious experience, his spirit is stronger and less complaining. (Amir Sham, 2010). In Indonesia, when viewed according to gender and place of residence, the percentage of elderly men who follow religious activities higher than elderly women and elderly men reported more prepared to face death with the stock activity religious who have followed. In urban areas, elderly women enrolled at 55.98%, and elderly men by 62.87%. Whereas in rural areas, elderly women enrolled at 49.79%, with elderly men by 62.70% (BPS-RI.2010).

Indonesia is ranked fourth after China, India, and the United States for population growth of elderly and life expectancy of the elderly in 2010 an average of 72 years even reaching 80 years with the growth of the elderly population reached 23.992 inhabitants and by 2020 is expected to increase amounted to 28.882 people, an increasing number of the elderly population in the world causing many problems holistically. (Directorate General of Social Rehabilitation, 2013).

It is known that the results of the study the number of 40 elderly people in the gym Tresna Werdha KBRP east Jakarta, showed that elderly people who have a spiritual attitude which is higher by 50% / 20 elderly, balanced with the elderly who have a spiritual attitude that is low at 50% / 20 elderly (Amir Sham , 2010). While the research conducted by Arsyad 2012, that of the 11 respondents who researched 18.2% experienced anxiety due to insomnia and 27.3% of elderly anxious not because of insomnia but rather leads to a lack of adapting to his old age because it is very

close to death. Based on initial data that I get on 14-Nov-2014 in UPTD Griya Wherda Surabaya alone, of the elderly population in UPTD Griya Werdha Surabaya only 28.6% (10) seniors who are active in religious spiritual activities such as prayer and dikhir which have readiness to face death, while the rest (71.4%) were inactive spiritual activities 5 of them only 2 that have the readiness to face death.

Various studies have found that elderly people with the chronology of spiritual intelligence and behavior of high spiritual did not feel anxious and ready to face death. Research from Kurniawati (2009) about anxiety in the elderly in the face of death in terms of personality types elderly indicate that the elderly with integrated personality types feel the symptoms of anxiety in the face of death, the heart palpitations, sweating, and nervousness. While the elderly with personality types disintegrated, elderly people experience anxiety in the face of death and revealed through a negative trait, such as by confining themselves, aloof, avoiding social contact. Both studies showed that the difference in the response of each senior in the face of death.

Feelings of fear and excessive worry that cause symptoms in the elderly are more commonly known symptoms of anxiety. This is evidenced by research conducted by Santoso (2010) that the elderly who experience anxiety before the death, including the elderly are less prepared and influenced by two factors: internal factors that consist of isolation, depression, punishment of hell, and loneliness. While external consists of poor social, physical disability, and death of people nearby as well as a sense of dependence on others.

A general view of old age build the stigma that adults who are older or have aged more prepared for death or died of their life has lost its value. Instead, according to Markson in Miller (2012), although research shows that anxiety about death decreases with age, but the actual feeling of the death of the elderly varies according to the social situation of elderly people and experience life itself. Many older adults have a purpose in life that they expect to be met because of the youth have not been met, so that the elderly are not yet ready to face death.

As for some of the factors that influence which among other general data

about the age of education, employment history, gender and marital status, on the marital status of the elderly very big influence on the behavior of his spiritual as any spouse who has a spiritual attitude is good, it will affect also in pair the elderly to do spiritual good also. From some comparison scale of the problem in the background above the researchers felt it was important to do research with the title "Muslim Spiritual Behavior Relationships with Readiness Death in the Elderly in Nursing Griya Werdha Surabaya".

RESEARCH METHOD

The study design was the end result of a phase of the decisions made by researchers associated with how a researcher can be applied (Nursalam, 2001). This research was correlational design with a kind of analytical research and cross sectional approach. To measure the level or the ties between the two variabel non-parametric statistical test form Rhank Spearman correlation (Rho) with standard error program SPSS 21. Rhank Spearman correlation (Rho) was used to test the hypothesis associative significance when each variable associated ordinal form , and data sources should not be the same between variables (Sugiono, 2009). If the statistics show $\rho <$, then H1 accepted which means that there is a relationship between the dependent and independent variables. Meanwhile, if the statistical results showed $\rho > 0.05$ H0 Received which means there is no relationship between the dependent and independent variables.

RESULTS

Table 1 Spiritual Behaviour

Spiritual Behaviour	f	%
Good	5	14,3
Fair	8	25,7
Poor	21	60,0
Total	35	100

From table 1 above is known mostly as much as 21 respondents (60.0%) Spiritual behave less and a fraction as much as five respondents (14.3%) of spiritual well-behaved. From table 2 above is known mostly as much as 28 respondents (80.0%) were not prepared Facing Death, and as many as seven small percentages of respondents (20.0%) were ready to Face Death.

Table 2 Readiness to face Death

Readiness to face death	f	%
Ready	7	20,0
Not Ready	28	80,0
Total	35	100

From Table 3 above is said to be mostly elderly behave spiritual less and are not ready to face the death of as many as 28 respondents

Table 3 Correlation between Spiritual Behavior and readiness to face death

Spirituality	Readiness to face Death				Total	
	Ready (n)	%	Not Ready (n)	%		
Good	5	14,29	0	0	5	14,29%
Fair	1	2	0	0	1	2%
Poor	1	2	20	57	21	60%
Total	7	20	28	80	35	100%

$p = 0,01, p < \alpha (0,01 < 0,05)$

DISCUSSION

Based on the test results table 4.3 Rank Spearman statistical correlation (rho) values obtained so $p = 0.01 < \alpha (0.01 < 0.05)$, then H_0 is rejected and H_1 accepted which means no relationship with the Spiritual Behavior Preparedness Death elderly in UPTD Griya Werdha Surabaya.

From the research results show respondents who did not prepare for death, the majority (80.0%) of 28, while respondents were ready to face death (20.0%) of 7 Elderly.

Elderly more regularly in religious life. It can be seen in thought and action everyday (Murray and Zentner, cited Nugroho, 2000 in Azizah 2011. Seniors who have learned how to deal with life changes through the mechanism of faith finally faced with the challenge end at death.

Religious attitude toward death affects how people of a certain age looking at death (Papalia, 2004). The attitude of the religious affiliation of the individual may be an important predictor for determining individual attitudes toward death. Christopher Drummond, Jones, Marek and Therriault found that religiosity is positively associated with positive attitudes towards death (eg, view death as the end of the natural life) and negatively associated with negative attitudes toward death (eg, view death as a failure) (Dezutter et al 2007).

From these discussions Elderly who behave less spiritual is the elderly who are not

(80%) and a small portion Elderly behaved spiritual good and ready to face death were 7 respondents (20%). The results of correlation statistic Spearman Rank rho values obtained so $p = 0.01 < \alpha (0.01 < 0.05)$, then H_0 is rejected and H_1 accepted meaning there is a spiritual attitude with kesiapa nmenghadapi death in the Elderly at Griya UPTD Werdha Surabaya in 2015.

ready to face death known research results in UPTD Griya Elderly Elderly unprepared Surabaya (80.0%) of 28 respondents, and the elderly were prepared (20%) of 7 respondents.

CONCLUSION

AND RECOMMENDATION

Conclusion

Elderly spiritual behavior of the elderly in UPTD Griya Wreda Surabaya mostly less doing spiritual behavior. Readiness to face death in the elderly in UPTD Griya Werdha Surabaya largely unprepared for death. No Relationship Between Behavior Muslim Spiritual Preparedness With Death At Griya UPTD Werdha Surabaya.

Recommendation

The results of this study are expected to add information and can be used as an evaluation given the need for spiritual behavior in the elderly to reduce the feeling unprepared for death will be experienced. As one of the programs to facilitate the elderly to get solutions and knowledge about the pension as well as coaching in the institution in terms of self-consciousness in its approach to almighty GOD.

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THE EFFECTIVENESS OF THE MC. KENZIE EXTENSION METHOD ON THE LOW BACK PAIN IN ELDERLY

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ABSTRACT

Introduction. There are many change happened because aging to the muskuloskleletal, some of them are limitedness movement, muscle stiffen and finally cause low back pain. One of the nurse intervention to reduce low back pain (LBP) is doing back exercise : Mc. Kenzie Extension Excise Method. The aim of this study was to evaluate the effect of Mc. Kenzie Extension Exercise to elderly with the low back pain in Hisosu Binjai Resident Home. **Method.** The research design was quasi experiment with the pre –post test group approach. The sample of this study were recruited with consecutive sampling as much as 28 people. This study used The Pain Numerical Rating Scale to evaluate levels of pain intensity perceived by the patient. The data was analyzed by Paired sample t-test with significance $\alpha < 0.05$. **Result.** The study found that there was significant differences of the low back pain ($p < 0.05$). The results of this study will contribute to better management of this population. In addition, compare the other back exercise include William Flexion of elderly in Hisosu Binjai Resident Home is recommended.

Key words : back exercise, elderly, low back pain, mc. kenzie extension

INTRODUCTION

The process of aging could be caused physical problems such as physically-biologically, mentally, economic and socially. A variety of change in elderly ocured on a musculosclatal system, include porous bones (osteoporotic), enlargement of joints, shift a tendon, limited motion, depletion of intervertebral discuss and muscular weakness that happened on aging process.

The bone reached its peak in age of 35 years, after it happned, bone losses thorough gradually. In the elderly, the structure of collagen less able to absorb the energy. So muscle does and power also reduced. Loss occurs the number of muscle fiber due to atrofimiofibril with the replacement of tissue fibrous that start to develop in the life in the fourth (Smeltzer, et al. 2013).

One of the problems that often occurs in elderly is the low back pain (Bandiyah, 2009). Approximately 11.0 %, the elderly lessen their physical activities after pension, although daily activity need many muscles. We often met in the community parents who have elderly prefer was in the house care grandchild than exercise, because they assumed that exercises spent many times.

Overall they are fear if the exercise will result in pain even worse due to the bone is not as strong as before.

According to Borenstein (2001); Hoogendoorn et al., (2000) stated that many risk factors that caused the low back pain such us the worker who spent all their time by interesting duty, holder and lift up heavy goods, smoker, obesity and activities which often do by sitting, and this factor will be influenced by aging process.

Low back pain (LBP), perhaps more accurately called lumbago or lumbosacral pain, occurs below the 12th rib and above the gluteal folds. LBP is one of the most common health problems all over the world (Waheed A, 2003; Sakiru & Hanifa, 2010).

Low back pain can be caused by a variety of problems with any parts of the complex, interconnected network of spinal muscles, nerves, bones, discs or tendons in the lumbar spine. Among changes in lumbar spine structures, age-related to degeneration of intervertebral disk cartilages and intervertebral joints are common causes of low back pain. Pain may be underreported because some elderly patients incorrectly believe that pain is a normal process of aging.

The lumbar spine structures that involved in development of low back pain are intervertebral disk cartilages, intervertebral joints, tendons, and muscles. When the sensory receptors in these structures receive nociceptive stimulation, they trigger a pain reaction in the pain sensation system, including both at the peripheral and the central levels. Inappropriate posture, irregular movement of the lumbar vertebrae, and reduced or imbalanced muscle strength enhance the nociceptive stimulation. Motion restriction due to pain leads to the contracture of intervertebral joints and the atrophy of the other lumbar spine structures, resulting in a vicious circle of pain (Yamamoto, 2003).

Epidemiology data about low back pain in Indonesia is nothing yet. Approximately 40% of Central Java society has over 65 years old who ever had low back pain (Sadeli & Tjahjono, 2004). The more number of low back pain is around 46 years old and over 60 years old (Wulandari, 2013). The research of *Community Oriented Program for Control of Rheumatic Disease (COPORD)* of Indonesia showed that the prevalence of low back pain about 18,2 % for men and 13,6 % for women. The incidence based on patients visiting to some hospitals in Indonesia about between 3-17 % (Sadeli & Tjahjono, 2004).

Low back pain recently was rated by the Global Burden of Disease Study as one of the 7 health conditions that most affect the world's population, and it is considered a debilitating health condition that affects the population for the greatest number of years over a lifetime. Low back pain also is associated with high treatment costs (Murray & Lopez, 2013).

The elderly people are one of a people community who has potential become facilitate people so that need to create a physical and non physical condition. More elderly who have low back pain handle it with resting, drink some traditional treatment or let it so. Elderly people often get pain on their low back if not taking muscle stretching as soon as possible by stretching so the joint will be small and resulting pain.

In reducing of low back pain on patients is recommended with conservative therapy (Lumbantobing, 2008). By this exercise therapy on low back case had become routine treatment for every practitioners in physiotherapy, but a nurse also can do the therapy. Nurse as role model in society have

big role in obligating the pain through non pharmacology approach. Intervention that include non pharmacology approach, such as giving good exercise (Misriani, 2004).

Back exercise is exercise that give great use. Back exercise that do routine in long time will progress the power of muscle actively, so that called as active stabilization. The progress of muscle power also have effect to progress immun of the body toward movement or loaded statistically and dynamically. One of back exercise that do is by Mc. Kenzie extension.

Mc. Kenzie Extension Exercises is one of back exercise that use body movement eminent by extension. The main goal of extension exercise is strengthen of extensor muscles of back. According to theory, extension exercise can assist to decrease pain with decrease intradiscal pressure (Starkey & Johnson, 2006). Giving of practice of Mc. Kenzie Extension can decrease low back pain for elderly because the effect of muscle spasm, so that can decrease low back pain.

According to Dachlan (2009), back exercise which taken in a month (3 times in a week) show that there is meaningful difference toward the decrease of pain with method of Mc. Kenzie Extension. Meanwhile, the result of Santoso, et.al (2002) explained that method by Mc. Kenzie Extension needs 6 times therapy minimally to reduce the low back pain of worker.

The principle on exercise therapy by Mc Kenzie Extension is to repair body posture and reduce lumbal hyperlordosis, muscle spasm decreasing through relax effect, avoid stiff intervertebral joint and checking the bad posture.

Back exercise is an easy movement, because it just having 6 moving and in every method spends 15 - 20 minutes. This method can do in 3 times in a week (Sa'adah, 2012) or 2 times in a day (Permana & Wahyuni, 2010). Beside easy to imitate, this exercise does not need sophisticated tools, cheap cost, special place, and it can do by ourselves based on Standard Operating Procedure (SOP). Back exercise also give influence toward the muscle bend progress, elastical bone and it can be reducing of low back pain.

This method, unlike other therapeutic methods, aims to make the patients as independent of the therapist as possible and thus capable of controlling their pain through

postural care and the practice of specific exercises for their problem. It encourages patients to move the spine in the direction that is not harmful to their problem, thus avoiding movement restriction due to kinesiophobia or pain (Mc Kenzie, 2003).

Due to the Mc. Kenzie Extension never been observed, this study was very important. The objectives of the study was to evaluate the effectiveness of Mc. Kenzie Extension Exercise to elderly with the low back pain in Hisosu Binjai Resident Home.

MATERIALS AND METHODS

The research design was quasi experiment with the pre –post test group approach.

This study was carried out between February and June 2015, at Resident Home in Hisosu Binjai, North Sumatera. The sample of this study were recruited with consecutive sampling as much as 28 people.

Inclusion criteria include: never got same therapy, pain intensity before doing research was minimum of moderate (Appley & Salomon, 1986), able to speak Indonesia, willing to followed research program completely for two weeks and low back pain did not accompanied with neurological disturbance. Patients will be excluded if they have any contraindication to physical exercise include evidence of nerve root compromise (ie, one or more moving, reflex, or sensation deficits), serious spinal pathology (eg, fracture, tumor, inflammatory and infectious diseases), serious cardiovascular and metabolic diseases, previous back surgery.

The measurement to evaluate pain by using *Numeric Rating Scale* (NRS) and has been translated into Indonesia language. NRS can be access by online on <http://www.partnersagainstpain.com/indexpc.aspx?sid-12&aid=7692>. The Pain Numerical Rating Scale is a scale that assesses the levels

of pain intensity perceived by the patient using an 10-point scale (0 to 10), in which 0 represents “no pain ” and 10 represents the “worst possible pain.

Approval for the research was obtained from the university. Next the patients will be interviewed by the researcher, who will determine eligibility. Eligible patients will be informed about the objectives of the study and asked to sign a consent form. The patient’s sociodemographic data and medical history will be recorded. Anonymity of the participants and the confidentiality of their information were assured throughout the research process.

The participants received 15 sessions of 15-20 minutes each (3 sessions per week for 5 weeks). Before and after the intervention, the participants will be instructed to select the average of pain intensity based on the rating scale.

IBM SPSS Statistics 21 was used for statistical analyses. To answer question, descriptive and were generated for studied variables. Descriptive statistic (mean, SD, persentase) were used to answer age, sex and life style of smoking in elderly at Hisosu Binjai Resident Home. Before we doing the inferential statistic (Paired sample t-test), first doing normality data by Shapiro Wilk Test. According to the result of Shapiro Wilk test, data were normally distributed. The effectiveness of Mc. Kenzie Extension in elderly was analysed using by Paired sample t-test with significance $\alpha < 0.05$.

RESULTS AND DISCUSSION

Based on the study, the mean of age were 67,85 (SD = 4,160) (table 1). Of the whole sample, the majority (57,14%) were male and 42,86% were female. Meanwhile 53,57% were smoker and 46,43% were no smoker (table 2). There was significantly differences Mc. Kenzie Extension in elderly ($p < 0.05$) (table 3).

Table 1. The Characteristics in Elderly with Low Back Pain

Variables	N	Mean	SD	Min-Max	95% CI
Age	28	67.85	4.160	60-74	65.33 – 70.36

The findings of this study were consistent with those of these previous studies. Among changes in lumbar spine structures, age-related degeneration of intervertebral disk cartilages and that of intervertebral joints are

common causes of low back pain. Aging is a well known risk factor of LBP as degenerative changes in the spine and disc. (Yamamoto, 2003).

Table 2. The Characteristic in Elderly with Low Back Pain

	Variables	N	%
Sex	Male	16	57.14
	Female	12	42.86
Life Style of Smoking	Smoker	15	53.57
	No Smoker	13	46.43

This study inconsistent with Cho, et al (2012) explained that The lifetime prevalence of LBP was 61.3%, with women having a higher prevalence. The point and 6-month prevalences were also higher among women. Some studies have shown that males are at greater risk for low back pain, while other studies suggest that females are more likely to develop this type of pain. Women who have had two or more pregnancies have a higher risk of developing low back pain.

This study consistent with Miranda et al. (2003) showed an association between smoking and LBP among subjects over 50 years old. In addition, another study showed an association between smoking and decreased bone mineral density in women.

Former smokers had a higher prevalence of low back pain compared with never smokers, but a lower prevalence of low back pain than current smokers. In cohort studies, both former (OR 1.32, 95% CI, 0.99-1.77) and current (OR 1.31, 95% CI, 1.11-1.55) smokers had an increased incidence of low back pain compared with never smokers (Shiri, et al, 2010).

According to the latest numbers available (2007), if you are a smoker, you are 2.7 times more likely to develop lower back

pain than if you didn't smoke. The researchers found that women who smoked complained more often of back pain than women who didn't smoke in both groups, not just the scoliosis group. It's not completely understood how cigarette smoking affects the back. One theory is that nicotine causes vasoconstriction, or narrowing of the blood vessels, that provide nutrition to the discs' cells. If the nutrients can't reach the cells, this leads to malnutrition of the disc and they can become damaged more easily. Malnourished tissues also can't heal themselves as quickly or as well as healthier, nourished cells. Nicotine is also known to thicken the walls of the blood vessels. This has the same effect of narrowing the blood vessels, slowing down blood flow. One of the by-products of cigarettes is carbon monoxide, an extremely poisonous gas. Carbon monoxide is also blamed for the increase in lower back pain. When you smoke, the carbon monoxide attaches itself to your hemoglobin, the part of your blood cells that carry oxygen to the tissues throughout your body. This burden on the hemoglobin takes up space, keeping much-needed oxygen from reaching the discs in your back. Like vasoconstriction, this causes malnutrition to the cells (Anonim, 2016., Shiri, et al, 2010).

Table 3. The Mc. Kenzie Extension Exercise of Elderly with Low Back Pain

Variable	N	Mean	SD	SE	p value
Pain intensity before Mc. Kenzie intervention	28	5,08	0,862	0,239	0,000
Pain intensity after Mc. Kenzie intervention	28	3,23	0,832	0,231	

This study was consistent by Permana & Wahyuni (2010), in which about giving stretching *Mc. Kenzie Extension* for women worker who as wrapper jamu in PT. X Semarang, explained that there is a significant difference between fressing back after and before taking therapy by *Kenzie Extension* ($p < 0,05$). According to Dachlan (2009), explained that there is significant influence by giving back exercise method by Mc. Kenzie

extension toward the decreasing of low back pain ($p < 0,05$).

The McKenzie method is an active therapy that involves repeated movements or sustained positions and has an educational component with the purpose of minimizing pain and disability and improving spinal mobility (Mc. Kenzie & May, 2003).

The average decreasing of low back pain caused the result of extencor back muscle strengthen through Mc. Kenzie Extension

exercise so that reducing the pain. It has related to muscle work, the more muscle strengthen, the more muscle having contraction and in contrary. The muscle do their fuction with couple because when agonist muscle in contraction so antagonist muscle in other way in rilex. If this is not happend, the two muscle will draving each other blocking the movement, and resulting and the pain (Greenburg & Michele, 2016).

The main goal of this extension exercise is to strengthen of extensor back muscles. The mechanism of Mc Kenzie extension exercise in low back pain reduce is by reducing the pressure on posterior annulus fibrosus through extension movements. Theoretically, extension exercise can help to reduce pain with reducing intradiscal pressure (Starkey & Johnson, 2006). This method also provides patients with tools to promote their autonomy in managing the current pain and even future recurrences.

CONCLUSION

The study found that there was significant differences of lower back pain in elderly ($p < 0,05$).

The results of this study will contribute to better management of this population. In addition, compare the other back exercises include William Flexion of elderly is recommended in Hisosu Binjai Resident Home.

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EFFECT OF GARLIC TOWARD CHOLESTEROL LEVEL OF ELDERLY AT SUMENGKO VILLAGE, DISTRICT OF GRESIK

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ABSTRACT

Introduction:High cholesterol level is a trigger of degenerative diseases for elder people. Several factors contribute to the increasing cholesterol level, including cholesterol metabolic process, especially cholesterol excretion process. Garlics a cultivated herbal plant contains several compounds that can reduce cholesterol level such as dialyldisulfide, ajoene and allysin. This study was to analyze the effect of garlic consumption with 10 gram dose (once a day) and 15 gram dose (twice a day) as a comparative of cholesterol's changing level and both may provide different effect for elderly.

Method:This study used Quasy experiment design and samples were taken from the elderly who have cholesterol level >200mg/dl in Sumengko village District of Gresik. Independent variables was 10 gram dose and 15 gram dose garlic where filtered. The Dependent variable was cholesterol level. The Sampling technique was purposive sampling and patients who are willing to participate totaled 14 people, divided by 7 respondents in the treatment group (10 gram) and 7 respondents in the comparison group (15 gram). **Result:**Statistical result using T-paired test showed that there were a significant effect from consumption 10 gram garlic (once a day) $p=0,01$ but at the same time consumption 15 gram garlic (twice a day) didn't give any different affect to influence of cholesterol level $p=0,26$. The result test which uses Independent Sample Test showed there was no significant differences between treatment group and comparing group in the cholesterol level. There was no significant difference between consumption 10 gram garlic (once a day) and 15 gram garlic (twice a day). **Conclusion:**Nurse may recomend 10 gram garlic consumption as a complementary therapy for hipercholesterolemia treatment. For further study, it is important to explore the various method to serving garlic in order preserve essential component of the garliuc and also may having a better number of participants .

Key words: elderly, garlic, cholesterol level

COMPLAINT MANAGEMENT ON HEALTH CARE IMPROVEMENT EFFORTS AS A CUSTOMER SATISFACTION

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ABSTRACT

Introduction: Health care is a services provision form that are at the forefront in the service that should be taken seriously how the quality of the service provided. This study aimed to review literatures related to the behavior of customer complaints and how service providers response with customers ideas or complaints in the hope that can help health care providers determine the best strategy in maintaining consumer confidence and awareness in order to feel satisfied with the services provided. **Method:** Schoolar google, proquest and PubMed were used to search the articles restricted between 2005 to 2015. Through the keyword "customer complaint", "patient complaint", "customer complaints", "complaint management", "management of complaints ", " hospitals ", and " health services ", got 2 articles, 2 theses and one chapter books appropriate to do a review. Articles, thesis and chapter books obtained then reviewed in accordance with the inclusion criteria based on the PICO frame work. **Result:** The results of the 5 reviewed literature provide the methods and the importance of complaint management in health care providers (hospitals and clinics) to enhance customer satisfaction. **Conclusion:** Good customer complaints management can be improved materials for health care providers in an effort to improve customer satisfaction.

Key words: customer complaint, complaint management, hospitals, health services

INTRODUCTION

Health care is the effort made by itself or together in an organization to maintain and improve health, prevent and treat disease and restore health directed against individuals, groups and communities. (Trimumpuni, 2009). The shift in the purpose of hospital services from social organizations into socio-economic organization requires the management to be able to maintain the patients or customers in order to compete with other hospitals (Afriani, 2012).

Service must be performed according to standards and fulfill the standards of quality that are oriented to the interests of consumers, in accordance with the wishes of the community that is increasingly growing (Hanson, Winnie and Hsiao, 2004). The tendency of the behavior of the medical practitioners who do not consider processes of communication or information exchange, and mutually beneficial social interaction causes the consumer as health service users such as patients, not realizing that they have the right to obtain satisfactory service. That is, a patient has the right to deliver services or questioned

felt unclear, burdensome even consumers themselves (Rahayu, 2011).

There are two consumer reactions to the failure of the service, namely to survive or move to any other provider. In the literature of marketing services, consumer reaction to the failure of services embodied in the form of complaining behavior (behavioral complaints) and brand switching (switching to another service provider) (Alfansi and Atmaja, 2008). Customers spirit to express their opinions or behavior of voice can increase their satisfaction, especially for customers who do not feel the satisfaction with the services provided (Ernawati, 2010).

If customers are not satisfied then what happens are 96% of dissatisfied customers will go away or leave the company service provider quietly and only 4% who submit complaints to the company. The customers who go away the 3% due to moving, 5% due to find other service providers, 9% for persuasion competitors, 14% because they were not satisfied with the product they bought and 68% due to the indifference shown by the service provider . On average an unhappy customer will tell 8-10 problems to his friend. One in

five of dissatisfied customers will tell the problem to 20 friends.

The challenge for health care providers is how to capture and use that information to productively improving the quality, safety and accessibility of the health care system for consumers, complaints and other comments from consumers is a valuable learning tool (Health Service Review Council, 2005). Instead, it becomes a threat when patients are not satisfied with the services provided convey the bad experiences to others or even some silent, leave service provider (exit) and switch to the other hospital (Georson, 2002).

Overview reality complaint handling and understanding of the expectations or the expectations of society towards real conditions of service and the service received should be understood to equate a measure of satisfaction. Furthermore, the evaluation of complaint handling can be made fairly (Setyorini, 2008).

This study aimed to do a review on the literature related to the behavior of customer complaints and how service providers cope with ideas or complaints in the hope that can help health care providers determine the best strategy to maintain confidence and consumer concerns to be satisfied with the services provided and to take part in an effort to repair and improve the quality of services through the complaints presented.

METHOD

Articles in English and Bahasa Indonesia that are relevant to the topic done electronically by using several databases, including databases scholar google, proquest and PubMed restricted from 2005 to 2015. Through the keyword "customer complaint", "patient complaint", "complaint customer", "complaint management", "management of complaints", "hospitals", and "health services" obtained 20 articles, 4 theses, and three chapter books.

Articles, thesis and chapter books obtained then reviewed in accordance with the inclusion criteria based on the PICO framework (P: customers Hospital / service providers, O: managing complaints), from the searching results was obtained 2 articles, 2 theses and one chapter appropriate books to do the reviews related to the topics raised, then identified and presented in the table.

RESULTS

Two studies examined in this study use descriptive research with cross sectional method, two other studies using qualitative research using in-depth interview technique to the respondent. This study also review Chapter 2 (Chapter 18. The Things That Need To Look For When Customers Complain) of a book written by Michael LeBoeuf, Ph. D. (2010) Yang called How To Win Customers and Keep Them for Life. The first study conducted by Afriani (2012) This is a qualitative research that aimed to identify the type of customer complaints in Fatmawati Jakarta and the complaint handling process conducted by the hospital as a service provider. The study was conducted in May - June 2012, especially in the installation of Marketing and Public Relations. Primary data was obtained from in-depth interviews to 9 informants, namely Head Installation of Marketing and Public Relations (1), the Deputy Head of Public Relations (1), Officer Public Relations (2 People), Information Officer of Outpatient (1), Information Officer of Griya husada (1) and 3 customers of Fatmawati Hospital.

The results showed that the type of common complaints submitted by customers of Fatmawati hospital patients is associated administrative processes, services of doctors and nurses, as well as the rates of hospital facilities. The customer can submit complaints directly to the public relations officer or information officer at the installation as well as indirectly through the mail, sms, telephone, e-mail suggestion box and hospitals. In handling public relations officer will document the complaint they received, seek a solution by coordinating with the related working unit and deliver it to the customer. A report on the complaints that recapitulated once a month to make an evaluation for related work units. In the study also noted that there has been a Standard Operating Procedure (SOP) for handling complaints in writing, but the socialization is not going well at each business unit and Fatmawati Hospital customers. Lack of training on handling complaints has also become one of the existing obstacles in implementing SOP.

The second study is also a descriptive qualitative research conducted by Wulandari (2014) to describe the management of complaints in Pasar Rebo. Researchers conducted in-depth interviews to the seven

respondents who are directly related to the handling of complaints, among others, the Head of the Executive Unit of Marketing, Verification Inpatient PJ, PJ Information and Publications, and marketing unit (4). The results showed that the types of complaints usually handled are around the issue of health insurance or BPJS, of the incoming data there is no problem that requires handling from the management level. But it does not rule out the possibility that there is a complaint that was not recorded or reported. Marketing unit is the unit that manages the complaint, in contrast to previous research in Pasar Rebo Hospital that there are no technical guidance measures for handling complaints. Lack of human resources, infrastructure such as suggestion boxes, phone or sms, information center and technical guidelines can reduce the effectiveness of the services provided by the marketing unit on a complaint they received.

Research conducted by Jabbari et al (2014) at a hospital in Isfahan, Iran also illustrates how the characteristics of the patient's complaints at the hospital. Research using cross sectional method uses all complaints ever recorded in the unit specially the reception of complaints ranging from 2012 through 2013 to determine which units receiving complaints, Human Resources received a complaint, and the results of the investigation of the existing complaint. The data collection period is divided into four groups, in the 2nd quarter (2012) there were 337 complaints, 3rd quarter (2012) were as many as 348 complaints, 4th quarter (2012) were 318 complaints, and 1st quarter (2013), there were 200 complaints. From the complaints recorded, the highest complaint pointed to the doctor's services, while nursing services ranked second complained. The unit received the most complaints of the total registered complaints are private booths and the least complained about is the problem of cleanliness. During the study in the Feb-Mar (2nd quarter 2012) which was recorded at most 47.1% of unresolved complaints or pending. Complaints and the results of treatment need to be made to reveal the rule that standardized for handling complaints or grievances that exist, the decrease of complaints recorded from 2012 to 2013 does not necessarily reflect the service or services that provide the better, but it could also indicate that customers are no longer concerned about the hospital goodness.

The fourth article written by Zaluchu et al (2014) on the results of a comparative study with cross sectional method to compare the characteristics of complaints in hospitals and in health centers and how both of these health care providers respond to complaints there. The study population was all patients in government health centers and hospitals in the province of North Sumatra. Sample selected purposively in seven regencies / cities in North Sumatra Province. Selection of respondents by quota sampling as many as 50 patients from each health center and a total sample of 200 respondents. Respondents to the hospital are close relatives of hospitalized patients had a minimum of three days of treatment, and the total of respondents were 150 respondents. From the results of the questionnaires distributed showed that 14.28% of patients in the hospital and 16.57% in health centers never had any complaints. Of these, only 40% of patients in the hospital who then submit complaints, while 51.7% of patients in health centers that submit complaints. From those who had complaints in the hospital and did not deliver 56.6% of the main reasons is fear, whereas 46.6% of patients in the clinic who will not submit complaints reasoned that there was no point in delivering the complaint. Related types of grievances, issue of new patient admission procedures and service unfriendly become the highest complaints in hospitals and health centers. In his book, *How To Win Customers and Keep Them for Life* Chapter 18: Things that need to be considered when a customer complains, LeBoeuf (2010) states that mishandled of complaints can cause harm to providers service, not only because of the loss of a customer, but the customer will tell a bad experience at another person, so that the service providers will also lose potential new customers. It was also mentioned in this book, main reason that causes the program to customer complaints can reward or return on investment is large, there are: 1) The customer complaint shows the areas that need improvement, 2) complaint is the second opportunity for service providers to provide services and satisfaction to customers who were disappointed, 3) the complaint is a tremendous opportunity to strengthen customer loyalty.

DISCUSSION

Nursing care is an integral part of health care in the hospital, which has a very strategic position in an effort to improve service quality and the satisfaction of customers who come to the hospital. Number of nursing personnel to dominate the overall health personnel, as well as the first and longest stranding contact with customers (patients and families). As an effort to improve the quality of service to their proper management and appropriate complaints standards expected to be input to the nursing profession for the repair and improvement of nursing services in order to meet the expectations of customers while utilizing the same back nursing services.

CONCLUSION

The results of a review of the five literature above can be deduced that health care providers need to consider the standard operating procedures for handling complaints of every customer and immediately gave the best response as a solution, but it also provides an opportunity for customers to be able to express their grievances through the facilities provided so getting container right in expressing opinions. This is in addition aim to enhance customer satisfaction can also be used as input for the evaluation and health care providers to dynamically improve the service provided to create customer loyalty.

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EXTERNAL AND INTERNAL FACTORS INFLUENCING JOB STRESS IN NURSING AT EMERGENCY DEPARTMENT

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ABSTRACT

Introduction: Emergency Department (ED) is a specialized nursing unit manage patients with critical condition therefore requires a high knowledge and skills to manage of these conditions. ED nurse is a professional who has the risk of work stress have higher levels. Aims to identify factors of job stress in emergency department, **Method:** A literature search from April 2006 to April 2016 was conducted using the key words nursing, job stress, and factors influencing the job stress. **Results:** Some of the factors that affect the incidence of job stress in the ED include internal and external factors. The external factors such as the high of workload, lack of control, the participation or activity of nurses, the lack of reward is given, the interaction social environments, organizational characteristics, the conflict, the patient care and the death of patient. The internal factors such as age, gender, marital status, education, length of work and coping mechanism. **Discussions:** Identification of external and internal factors are very important for nurses so that can be done for prevention in order to reduce the occurrence of job stress. Stress intervention should be implemented to reduce the job stress.

Key words: *internal, external factors, emergency department nurses, job stress*

INTRODUCTION

Emergency department (ED) is a nursing unit that specialized in patients with critical condition as a result of trauma and non-trauma, therefore it takes a knowledge and skills to manage the patient's condition with life threatening, but it is also required decision making and ability perform resuscitation with fast, precise and accurately (Finlayson, 2010). The others characteristic that can be found in the ED is a condition of the patient cannot be predicted, the working time is sometimes elongated, pressure from the applicable management in the emergency department, as well as the time limit in the of health services (Urbaneto, et al. 2011; Carbera et al . 2012). Some of these characteristics to the demands which led to the ED became one of the working environment has a high stressor (Saeedi in Mustafidz, 2013).

Job stress that occur to nurses in the United States reached 40%, while in the UK reached 42% to burnout (Duffin, 2012), while the highest incidence of stress of nurses in Asia occurred Japan, reaching almost 80% (Poghosyan et al, 2010).

ED nurse is a professional who has the risk of job stress have higher levels than nurses in other unit (Shimizu et al., 2006 and Ilhan et al., 2008). Some of the factors that

influence caused job stress in the ED among other external factors which consists of a high workload, lack of, knowledge and appropriate skills with the standards will give a pressure on its own for the nurse, the lack of reward given, the interaction between colleagues was not good, while internal factors that influence include age, marital status, education and gender status (Roosnawati 2010 and Greenberg, 2006).

Identification of external and internal factors are very important for nurses in the improvement of human resources in particular ED nurse so that it can be done for prevention in order to reduce the job of stress in nurses working in order to improve the quality of nursing services to patients in the ED.

METHOD

A literature search from April 2006 to April 2016 was conducted using the key words nursing, job stress, and factors influencing the job stress.

RESULTS

Some of the factors that affect the incidence of job stress in the ED include internal and external factors. The external factors such as the high of workload, lack of control, the participation or activity of nurses,

the lack of reward is given, the interaction social environments, organizational characteristics, the conflict, the patient care and the death of patient. The internal factors such as age, gender, marital status, education, length of work and coping mechanism.

DISCUSSION

Stress is a normal response of the individual and can bring negative effects, as well as positive effects (Saeedi, 2006). Stress is also a response to the individual in the face of stressors in the surrounding (Potter and Perry, 2006). Coffey and Coleman (2006) defines stress as a response to defend itself from pressure or stressful physical, emotional, social, economic, environmental, or experiences that happen to individuals. The job is one source of the causes of stress in nurse (Walinga, 2009). Therefore, job stress could be interpreted as an individual response arising from job stressors encountered in both physiological and psychological that may threaten them so it appears the compensating effect of the individual positive or negative.

External factors and internal factors influence job stress in the ED. The workload of the work done by someone. Workload depends on how the person handling it. If someone who works with the state of dissatisfied and unpleasant, your job will be a burden for him. Schultz (2006) states the workloads is too much work in the time available, or the work that is too difficult for nurses. Lack of staff, time and other resources would be some impact on the imbalance between workload and staff capability to solve them so as to make the higher staff workload. Workload can cause stress divided into two: the first role overload occurs when demands exceed the capacity of someone to meet these demands adequately. The second is role under load a job where demands faced under one's own capacity. The lack of individual ability to show appropriate standardized performance will put pressure on its own for the individual. The participation of nurses in the workplace is an opportunity for participation by nurses as an opportunity to improve the level of education, career, an opportunity to participate in decision-making. The smaller the chance of a person to participate in the work place can create a sense of lack of control (lack of control). Reward is something that was given as a form of motivation to work productivity can be

increased. Siegrist et al (2006) said that reward can be given to the nurse such as money and self-esteem. Based on Franco et al. (2006) motivation has an important role for individuals who work. This motivation will arise if he was comfortable with his work and comfort will arise one of them if there is support from others. Sarafino (2006) also stated that individuals can provide reward by giving the support or positive expression to other individuals. If there is not the good contribution and opportunity to develop for nurses so the nurse could have a job stress.

The social environment provides an important role in a person in causing the stress conditions if it is not be organized very well. The bad relationships with friends, lack of support from colleagues, and the influence of the style of leadership of a manager into an influential factor in the cause of job stress. Characteristics of the organization is the management staff and unit in the emergency department that describes management conditions that can lead to job stress include high workload, the number of staff in the unit, the number of patient beds, the target treatment 4 hours, and the payroll system and the amount of salary for nurses (Flowerdew et al, 2011) this factor relates to salaries and policies issued in an organization. Conflict is meant a problem that occurs due to the mismatch between the demands of the work done by the principle of the individual's personal. Conflicts also could indicate a problem with a fellow professional nurse or doctor. This causes a lack of social support and cooperation.

Patient care performed by ED nurse must monitor this condition of the patients, many variations nursing actions that must be done to patients, (Caplan and Sadock, 2006). Treatments of patients in the ER are usually done with complex maintenance problems and sometimes occur in large numbers. (Aguir, et al, 2006; Healy and Tyrell, 2011). Patient care such as this makes the nurse susceptible to job stress. The death of a patient who is often encountered is an event that causes stress, excessive workloads are increasingly making nurses are not able to cope against stress experienced by the death of the patient. Unexpected death and sudden cause nurse have a job stress. Because the nurse felt failure to help the patient, as well as the research that was done in Jordan that the nurses in the ER

stress is strongly influenced by the death of the patient. (Hamaidah. Et al. 2008).

Nurses have a stressor that comes not only from within but also from the lack of well worth a work environment, equipment incomplete and is not in accordance with the development of science also can affect the level of job stress (Ross-Adjie, et al 2007). The availability of resources is essential for nurses and has been proven to improve the efficiency and motivation of nurses (Franco et al., 2006). Availability of resources is considered as a form of support needed by nurses in their contributions to provide services to patients efficiently and effectively. Adequate resources to alleviate the heavy workload tend to improve the working conditions for the better and also to increase the motivation of nurses in the work. However, if the available resources are inadequate, it could increase the workload and increase job stress anyway. (Jeremy, 2006).

Internal Factors are characteristics of the individual (nurse) are also influencing in determining how the individual is able to control the stressors. Nurses with an older age will be able to show the maturity of life, they more able to think rationally, they could control emotions, and also demonstrate the intellectual and psychological maturity. Based on the research Wijono (2006) showed that stress levels lower occurred in nurses with age > 40 years as well as in research of Healy and Tyrell (2011) also explained that of all the demographic variables, age is one of variable that consistently influence job stress. It is because that someone with a younger age still does not have enough ability and skills in dealing with full employment with the stressor. A young age is also associated with the level of knowledge and preparedness of nurses in treating patients (Kwok Bun, 2007).

Some of research show that gender also influence job stress. Bekker et al. (2006) showed that the level of work stress in women is higher than men. This is caused by a physiological response that is different between men and women, while women stress then give reason physiological form of activity of some hormones and neurotransmitters in the brain that provide the missing feedback is negative in the brain so that it can improve the emotional trauma and physical stress, while according to Purvanova & Muros (2010) showed that women were more likely to

express feelings of emotional exhaustion. Related to the status of marriage, a nurse who was married are more susceptible to job stress (Lin et al., 2008 and Vierdilina, 2008). This is possibly due to problems that often occur in families, especially the nurse have children under five years, which require special attention such as when ill, while the mother (a nurse) have to keep working, both these responsibilities will lead to the nurse susceptible to stress. Different from Ogden (2006) showed that nurses who are not married are more susceptible to job stress because when they already married, their husband or wife would be support them when they solved problems.

Job stress occurred in nurses who have higher education, it is because of the job with greater responsibility while the level of higher education and also have the desire or too high expectations on their work so that they would be distressed if his hopes were not realized. This is supported in the research Delaney C, Piscopo BJ (2007) which shows that the effect on job stress education and also the research Wu, et al (2011) which is using samples of nurse education programs AND (Associate Degree in Nursing) and nurses with educational programs BSN (Bachelors of science in Nursing degree), BSN program graduates generally tend to have higher stress when compared to graduates AND.

The longer a nurse working it will be more are skilled in do the job, as well as higher levels of satisfaction so that the stress in a more down, Likewise in the early years of the nurse work stress its higher due to the novice nurse still needs time to feel confident, have a good skill and competent for implementing the service (Laschinger et al., 2009). Coping mechanism is a process for treating existing demands to assess and consider the capabilities and capacity of the individual. Lazarus in Seaward (2006) there are two coping strategies used by nurses in dealing with job stress in the ER. The first strategy is coping strategy that focuses on emotional (emotional focused coping) and the second is a coping strategy that focuses on the problems (problem focused coping, this strategy is expected to reduce the stress that occurs and the existing problems can be resolved properly. On the emotional focused coping, individuals prefer to change or modify the function of emotion possessed without making an effort to change the

stressors such as withdrawal, avoidance, self-control, and a positive mindset. While the problem focused coping, individuals will use this strategy to the assumption that condition or situation at hand can be controlled so that the condition or the situation can be changed, such as constructive problem solving and social support.

CONCLUSION AND RECOMMENDATION

Stress is a normal response of the individual and can bring negative effects, as well as positive effects. The factors influencing job stress are the external and internal factors. The External factors such as the high of workload, lack of control, the participation or activity of nurses, the lack of reward is given, the interaction social environments, organizational characteristics, the conflict, the patient care and the death of patient.

The internal factors such as age, gender, marital status, education, length of work and coping mechanism. Identification of external and internal factors are very important for nurses so that can be done for prevention in order to reduce the occurrence of job stress, Stress intervention measures should focus on stress prevention for nurses so it will decrease the job stress.

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NURSES PERCEPTIONS OF LEADERSHIP BEHAVIOR MANAGER IN THE APPLICATION OF THE SIX QUALITY TARGETS PATIENT SAFETY IN PRIVATE HOSPITAL

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ABSTRACT

Introduction: Leadership behavior is the response of the individual as a motivator in an organization that is manifested in leadership activities in relation between task and relationship with a subordinate who has positive and negative effects in order to achieve organizational goals. This study aims to identify the nurse's perception of leadership behavior of nurse unit manager in the application of the six quality targets patient safety in Siti Khodijah Sepanjang Hospital. **Methods:** This study used a descriptive design with a sample of 67 nurses. The sampling technique used purposive sampling. The research instrument used questionnaire. Methods of using univariate analysis with frequency distribution and percentage. Leadership behavior in this study include behavior-oriented and task-oriented behavior relationships. **Results:** The results of the study illustrate that the majority of nurses assess the behavior of the leadership of the head of a task-oriented rooms were in good category (92,5%), while the behavior of the head of the room-oriented human relationships majority of nurses rated both (91%). **Discussion:** Nurse unit manager is always apply discipline in the task and always provide direction to nurses before implementing six patient safety and quality objectives always take the time to listen to the barriers that prevent nurses currently implementing six patient safety quality objectives.

Key words: *behavioral leadership, head of the room, patient safety*

BACKGROUND

Hospital as a health care institution both government and private sectors are required to always make improvements and enhancements in order to provide a quality service and useful for people. One quality improvement in hospitals is to run a patient safety program (patient safety). Patient safety according to national guidelines patient safety from the Department of Health (now the Ministry of Health) RI is a program to maintain quality by making patient care safer. Patient Safety Goals is a requirement to be applied in all hospitals accredited by the Commission on Accreditation of Hospitals. The preparation of this target refers to the Nine Life-Saving Patient Safety Solutions of WHO Patient Safety (2007) used also by the Hospital Patient Safety Committee PERSI (KKPRS PERSI), and the Joint Commission International (JCI) (KARS, 2012).

Therefore, efforts need to be very important in implementing patient safety goal is to improve human resource management and nursing management. Management of nursing

management performed by the manager of nursing. Suyanto (2009) states that the nursing manager has three levels, namely the top management, middle management, lower management. Nurse unit manager is located in the lower levels of management to manage nursing services must have the ability to lead, to be effective in managing service management to support nursing care services (Marquis and Huston, 2010). A leader must behave good, honest, nurturing and sensitive to environmental needs and is engaged in the scope of the theory of leader behavior. Leadership behavior can be understood as any behavior or personality (personality) a leader embodied in leadership activities in relation to the tasks and relationships with subordinates in order to achieve organizational goals (Maron and Supriyatno, 2008).

Based on preliminary studies conducted by researchers at the Siti Khodijah Hospital Sepanjang, the data obtained in 2014 was the incidence of pressure sores is 2% - 7.5% which exceeds the minimum service standard 129 / Menkes / SK / II / 2008, which

was supposed $\leq 2\%$, the rate of KTD (Genesis Unexpected) which is 4% which exceeds the minimum service standard 129 / Menkes / SK / II / 2008, which should $\leq 1.5\%$. Based on research Amaliyah, (2014) stated that the three rooms in the Siti Khadija hospital with the quality of nursing care less and two rooms with enough quality nursing services. Hospital Siti Khodijah Throughout, each room has a head and a nurse who served in the rooms each room with an assortment of leadership behavior. Based on research conducted (Dhinamita, 2013) that the effective leadership of head space will affect efforts to mobilize nurses within the scope of his authority to implement a patient safety culture.

Based on the above terms the author were interested in doing research about the behavior of the leadership of nurse unit manager in the application of the six quality targets patient safety from the perspective of a hospital nurse Siti Khadijah Sepanjang.

METHODS

This research uses descriptive research. The population is all nurses working in inpatient hospital Siti Khadija along. A sample of 67 people with purposive sampling technique sampling. The instrument used in this study is in the form of a questionnaire to determine the behavior of the leadership of

nurse unit manager in the application of the six patient safety quality objectives. The research was done by giving questionnaires to nurse a permanent employee. Univariate data analysis techniques by using quantitative frequency distribution and percentage.

RESULTS

Based on the analysis of data on 67 nurses showed that the majority of nurses perceive patient room leadership behavior nurse unit manager at the Siti Khodijah Hospital throughout a behavioral task-oriented leadership was good, amounting to 92.5% and behavior-oriented leadership in human relations good which amounted to 91%. Task-oriented leadership behaviors are always done by the head of the room is oriented leadership behaviors in task 1 that the nurse unit manager is always briefed about six nurses patient safety quality objectives before the nurses do the job. Behavior-oriented leadership in human relations is always done by the head of the room is the behavior of the leadership of the relationship between man 6 nurse unit manager always take the time to listen to the barriers that prevent nurses currently implementing six patient safety quality objectives. Based on the frequency distribution and the proportion of the implementation of the behavioral tendencies leadership rooms based on the sub-variables can be seen in the following table:

Table 1.1 Distribution of Frequency and Proportion tendency Implementation Leadership Behavior in Space Nurse unit manager Inpatient Hospital Siti Khodijah Throughout 2015 (n = 67)

Leadership Behavior	Frequency	Proportion (%)
Task Orientation		
Good	62	92,5
Less	5	7,5
Human Relationships		
Good	61	91
Less	6	9

Table 1.2 Distribution of Frequency and Proportion tendency Implementation Leadership Behavior Nurse unit manager is a task-oriented in space Inpatient Hospital Siti Khodijah Throughout 2015 (n = 67)

Criteria	Leadership Behavior Task Orientation 1	Leadership Behavior Task Orientation 2	Leadership Behavior Task Orientation 3	Leadership Behavior Task Orientation 4	Leadership Behavior Task Orientation 5	Leadership Behavior Task Orientation 6
Never	0 (0%)	0 (0%)	0 (0%)	1 (2%)	2 (3%)	4 (7%)
Sometimes	3 (5%)	12 (18%)	12 (18%)	15 (22%)	16 (24%)	9 (13%)
Often	31 (46%)	35 (52%)	30 (45%)	23 (34%)	23 (34%)	33 (49%)
Always	33 (49%)	20 (30%)	25 (37%)	28 (42%)	26 (39%)	21 (31%)

Table 1.3 Distribution of Frequency and Proportion tendency Implementation Leadership Behavior Nurse unit manager oriented human relations in space Inpatient Hospital Siti Khodijah Throughout 2015 (n = 67)

Criteria	Leadership Behavior Human relations 1	Leadership Behavior Human relations 2	Leadership Behavior Human relations 3	Leadership Behavior Human relations 4	Leadership Behavior Human relations 5	Leadership Behavior Human relations 6
Never	0 (0%)	2 (4%)	2 (2%)	1 (1%)	1 (1%)	5 (8%)
Sometimes	10 (15%)	9 (13%)	7 (10%)	8 (13%)	8 (13%)	10 (15%)
Often	30 (45%)	33 (49%)	31 (46%)	27 (40%)	32 (48%)	19 (28%)
Always	27 (40%)	23 (34%)	27 (40%)	31 (46%)	26 (38%)	33 (49%)

DISCUSSION

Based on the results of this study found that 92.5% head space that behaves oriented leadership good job and 91% head space that behaves leadership oriented human relations (Table 1.1), where the behavior of good leadership showed a high proportion of each indicator sub variables of leadership behaviors like 49% of nurse unit manager is always brief the nurse before doing the work, 49% head ruagan always willing to take the time to listen to the problems of his subordinates (table 1.2 and table 1.3).

The research result is in line with that proposed by Schriesheim and Bird (1979), in Daft (2006), in which task-oriented behavior is the level where the leader directing the work activities of subordinates to achieve goals. Leaders who use this style usually give instructions, spend the time to make plans, emphasizing the deadline, and gave explicit schedule of work activities. While behavior-oriented human relations is the level where the leaders are aware of the subordinates, respecting the ideas and feelings, and to build mutual trust. Leaders who are attentive are leaders who are friends, hold open communication, developing teamwork, and oriented towards the welfare of their

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subordinates. Nurse unit manager should be understood that individual nurses have basic needs and different goals (Swanburg, 2000).

Nurse unit manager is already understood the nurse as individuals who have basic needs, and in the execution of his role as head of the room can create a pleasant working atmosphere that can provide motivation for nurses. In addition to the motivation, the head of the room should be capable of doing solving conflicts in the room. Based on the results of the item statements about the head of the room to be objective in dealing with problems in nursing services.

CONCLUSION

AND

RECOMMENDATION

Based on the above results, it can be concluded that the behavior of the leadership of nurse unit manager in the Siti Khodijah hospital throughout oriented tasks most people do is always give directions to the nurse about six patient safety quality objectives before the nurses do the job. While the leadership behaviors oriented human relations are always conducted by the head of the room was the head of the room always take the time to listen to the barriers that prevent nurses currently implementing six patient safety quality objectives.

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STUDY COMPARATION TO FIND CORRELATION BETWEEN CLINICAL MANIFESTATIONS AND CLINICAL OUTCOMES OF TYPHOID FEVER PATIENTS AND TYPE OF SALMONELLA TYPHI STRAIN THAT ARE NON MDR AND MDR

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ABSTRACT

Introduction: The purpose of this analytic observational study was to find correlation between clinical manifestations and clinical outcomes of typhoid fever patients and type of *Salmonella typhi* strain that are Non MDR and MDR in the period of 2012-2014 at Dr. Soetomo Hospital. **Method:** Laboratory data were compiled from Clinical Microbiology Installation while clinical manifestations and clinical outcomes data were compiled from Medical Record Unit at Dr. Soetomo Hospital. **Result :** During the period of the study there were 30 records belong to Non MDR *Salmonella typhi* and 30 records belong to MDR *Salmonella typhi*. Cross tabulation analysis showed significant different in patient age (p value = 0,008), anorexia (p value= 0,002), nausea (p value= 0,038), vomiting (p value= 0,037), abdominal distension (p value= 0,028), constipation (p value= 0,000), dirty tongue (p value= 0,000), diarrhea (p value= 0,038), length of treatment (p value= 0,000) and discharge condition (p value= 0,035) between the two groups. **Conclusion :** It could be concluded that clinical manifestations and clinical outcomes of typhoid fever patients have correlations with the type of *Salmonella typhi* strain that are Non MDR and MDR.

Key words : Typhoid fever, clinical outcomes, Non MDR *Salmonella typhi*, MDR *Salmonella typhi*.

INTRODUCTION

Typhoid fever is caused by *Salmonella typhi* as a systemic infectious disease, endemic nature and is still a health problem in Indonesia. The incidence of this disease in Indonesia is likely to increase. Ministry of Health in 1997 reported typhoid fever ranges from 350-810 cases per 100,000 population per year with a mortality rate of 2%. In East Java incidence of typhoid fever in health centers and hospitals respectively 4000 and 1000 cases per month, with a mortality rate of 0.8% (Ministry of Health 1994). In the Dr. Soetomo Hospital Surabaya over a period of 5 years (1991-1995) has treated 586 patients with typhoid fever with a mortality rate of 1.4%, and during the 1996-2000 period, 1563 patients had been hospitalized with typhoid fever with a mortality rate of 1.09% (Soewondo, 2002).

Various factors come into effect on the incidence and mortality of typhoid fever, the external and internal factors. Aside from these factors there is still one more factor that needs serious attention is the management that is sometimes still not right. The big problem being faced in the treatment of typhoid fever is

widespread resistance. Various ways sought to avoid the resistance occurrence, among others, by shortening the treatment duration, the drug selection that have a high concentration of minimal inhibitory concentration of germs and able to circulate longer in the body (Nasronudin, et al., 2011).

Clinicians in some countries, in the last five years have observed typhoid fever cases are severe even fatal child, which was caused by *Salmonella typhi* strains resistant to chloramphenicol. Indian researchers have reported cases of typhoid fever resistant to chloramphenicol in 1970, while in Mexico for the first time reported in 1972. In the subsequent development of *Salmonella typhi* resistance, several countries have reported strains of multi-drug resistance (MDR) *Salmonella typhi* resistant against two or more antibiotics commonly used were ampicillin, chloramphenicol and cotrimoxazole. Double resistance is an obstacle and a problem that most of the programs of prevention and eradication of infectious diseases in the world. The cure rate in the treatment of MDR relatively lower, in addition to more difficult,

expensive and have more side effects that will be caused. Another problem, the drug resistance spread in various countries often unknown and inadequate management of patients with MDR (Iskandar, 2010).

Based on antecedent studies conducted in Dr. Soetomo Hospital in 2012-2014, found data on the number of patients with typhoid fever as many as 493 patients and found 30 patients have been infected with MDR strains of *Salmonella typhi*. Cases of typhoid fever is to have as many as 493 patients with possible cases and probable cases as many as 60 patients. It motivates researchers to conduct this research.

RESEARCH METHODS

This research is an analytic study using a retrospective cohort design. The sampling technique in this research is simple random sampling. Researcher using secondary data is DMK (Document Medical Health) data of the hospital in 2012-2014.

The population in this study is the all DMK patients hospitalized with typhoid fever Non MDR and MDR to antibiotics in Dr. Soetomo Hospital. The sample used is DMK's disease patients and children data with a clinical diagnosis of typhoid fever at the Dr. Soetomohospital who are Non TB and MDR against the antibiotics and microbiological data that has been proven by culture results. The samples were obtained of 60 samples with details of 30 cases and 30 controls.

Inclusion criteria of this study were: DMK typhoid fever who were hospitalized in the Dr. Soetomohospital during the period 2012 - 2014. DMK typhoid fever who were given antibiotics. And DMK typhoid fever who were declared not healed and recovered from typhoid fever by doctors. While the exclusion criteria of this study are : DMK typhoid fever with comorbidities. DMK typhoid fever who given antibiotics because of comorbidities. And data status of the patients are incomplete, lost, not clearly legible.

Variables that will be examined in this study is the independent variable that is antibiotic resistance incidence in both Non MDR and the MDR. While the dependent variable is the clinical patients with typhoid fever caused by a strain of *salmonella typhi*.

Data collection procedures in this study begins with data collection phase in the installation of Clinical Microbiology, after obtaining the data and then proceed with the data collection in the Medical Record Centre, after the DMK data is collected and the data is processed and analyzed. The study was conducted at Dr. Soetomo Hospital. Research conducted in August-October 2014.

RESULTS AND DISCUSSION

The results indicated that based on the proportion of patients with typhoid fever who were treated at the Dr. Soetomohospital complained of symptoms that include fever (96.7%), anorexia (86.7%), nausea (83.3%), vomiting (75%), epigastric pain (56.7%), and constipation (33.3%).

Based on the research can be seen that the proportion of patients with non-MDR typhoid fever greater with the typical triad of typhoid fever symptoms are fever (93.3%), epigastric pain (36.3%) and dirty tongue (6.7%). The proportion of patients with MDR typhoid fever greater with the typical triad of symptoms of typhoid fever include fever (100%), dirty tongue (53.3%) and epigastric pain (50%). These data were taken at the beginning of the history of typhoid fever patients admission to the hospital.

Based on the statistical analysis of the results obtained by the chi-square test p value less than $\alpha < 0.05$, which means that there is a significant difference of clinical symptoms of anorexia, nausea, vomiting, abdominal distension, constipation, dirty tongue, lethargy and diarrhea among patients with typhoid fever both MDR and Non MDR.

It is also in line with research conducted by Saraswati, et al., (2010) who obtained results clinical signs and symptoms research most commonly encountered include fever (100%), and digestive system disorders such as: nausea (58.46%), vomiting (50.31%), abdominal pain (35.38%), anorexia (32.31%), diarrhea (18.46%), constipation (12.31%), as well as dirty tongue (27.69%). This is slightly different to the research conducted by Herdiman in 2004 at Persahabatan Hospital Jakarta from 119 typhoid fever patients have a fever (100%), nausea/vomiting (84.7%) and diarrhea (84%).

CONCLUSIONS AND RECOMENDATION

Conclusion

Based on the research results can be concluded:

- 1) Clinical patients with typhoid fever caused by Salmonella who Non MDR with the typical triad of symptoms of typhoid fever are fever (93.3%), epigastric pain (36.3%) and dirty tongue (6.7%).
- 2) Clinical patients with typhoid fever caused by Salmonella who MDR with the typical triad of symptoms of typhoid fever include fever (100%), dirty tongue (53.3%) and epigastric pain (50%).
- 3) The difference in the patient's clinical typhoid fever caused by Salmonella Typhi strains of MDR and non-MDR where different symptoms include anorexia, nausea, vomiting, abdominal distension, constipation, diarrhea and dirty tongue.
- 4) The difference in the effectiveness of treatment duration and circumstances while returning, the Non MDR patients with a treatment duration of less than 7 days was able to return to be recovered condition while the MDR patients require a longer time to heal is a treatment duration of 7-14 days.

Recomendation

Expected to give antibiotics rationally by performing a culture specimen of patient before giving antibiotics to patients with typhoid fever that antibiotics used in accordance with the type of bacteria.

Clinical fever and dirty tongue is possible MDR typhoid fever. Types of Antibiotic that can be selected to treat include ciprofloxacin and cefotaxime for undiscovered resistance than that due to the nature of this antibiotic is bacteriostatic. Selection of antibiotic therapy for the treatment of typhoid fever that will result in the duration of treatment will be shorter.

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EFFECT OF FOOT DIABETIC EXERCISE ON FOOT NEUROPATHY IN DIABETIC TYPE II NON ULCER PATIENT AT ENDOCRINE POLYCLINIC DR. WAHIDIN SUDIROHUSODO HOSPITAL MAKASSAR

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ABSTRACT

Introduction: The movement in foot diabetic exercise can be an alternative for patients with diabetes to improve blood circulation and neuropathy response to the legs. The aims of this study were to find out the effectiveness of diabetes foot exercise in lowering blood pressure and the its effecton neuropathy response in patients with diabetic type II. **Method:** The study used Quasi experiment: non-equevalent control group. 17 enrolled participants did foot diabetics exercise every week until six week as an intervention group and 17 enrolled participants did nothing as a control group. Data were analyzed using paired T- test. **Result:** The study showed that The mean of neuropathy response in the intervention group was 2.59 (\pm 0.795) and the control group of 4.59 (\pm 0.618), the results of Mann - Whitney showed p value = 0,000. A Change in the average neuropathy response in those who did diabetic foot exercise 6 week was occurred due to Insulin resistance reduction. Diabetic foot exercise can increase levels of Nitric Oxide. Nitric Oxide is a substance secreted by the endothelial cells of blood vessels as a powerful vasodilator for blood vessels (Salam, 2012). The mean reduction in systolic blood pressure in the intervention group was 125 mmHg (115-130) and the control group 130 mmHg (120-135) and unpaired t test results obtained p = 0.071 ($p >$ 0.05). **Conclusion:** Diabetic foot exercise is an effective method to improve neuropathy respon and lowering systolic blood pressure.

Key words : foot exercise, neurophaty response, blood pressure, diabetic type II

SYSTEMIC LUPUS ERYTHEMATOSUS : CORRELATION BETWEEN SENSORY KNOWLEDGE, SELF-EFFICACY, PREVENTIVE ACTION TOWARDS TRIGGER FACTORS, SELF-CARE PRACTICE AND QUALITY OF LIFE

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ABSTRACT

Introduction: Systemic Lupus Erythematosus (lupus) and its complications could lower individual's health-related quality of life (HRQOL). Self-care is highly needed for sustaining self-involvement in lupus management. People with lupus need to have proper sensory knowledge and high self-efficacy for implementing preventive action towards trigger factors and self-care practice. This study aims to explain the correlation between sensory knowledge, self-efficacy, preventive action towards trigger factors, self-care practice and HRQOL in lupus patients. Method: This is a cross-sectional study mixing the model of Self-Care and Precede Proceed. Population was all lupus patients doing regular check up in Rheumatology Unit of Dr. Soetomo Hospital in October-December 2014. Sample size was 36 chosen by total sampling. Independent variables: sensory knowledge, self-efficacy, preventive action towards trigger factors and self-care practice; dependent variable: HRQOL. Instruments: ODAPUS-HEBI and LUPUSPRO. Data analysis: regression test; $\alpha \leq 0.05$. Result: 36 females respondents participated; suffered disease for 0.5 – 12 years.. Age range: 20-44 years old. Mostly were high school graduates, married and actively working. Most respondents have high sensory knowledge and self-efficacy; optimum preventive action and self-care practice, but HRQOL was not optimal. All data were normally distributed. Only sensory knowledge proved to be linear with HRQOL. There was a weak significant correlation identified between sensory knowledge and HRQOL ($r=0.344$, $p=0.040$); while self-efficacy, preventive action and self-care practice proved to have no correlation with HRQOL ($p > \alpha$). Conclusion: Sensory knowledge is correlated with HRQOL in people with lupus. Self-efficacy, preventive action towards trigger factors and self-care practice were proved to have no correlation.

Key words: Systemic Lupus Erythematosus, correlation, knowledge, self-efficacy, preventive action, self-care, HRQOL

BACKGROUND

Lupus is a disease where the immune system which normally fight infection, starts attacking healthy cells in the body or autoimmune phenomenon (DeLong, 2012). In Indonesia people with lupus are often called odapus. Lupus can be a burden and source of disability and also poor HRQOL (Cho *et al.*, 2014). Lupus is a chronic autoimmune disease which signs and symptoms may persist for more than six weeks and often up to several years (Lupus Foundation of America, 2012). However, there are also odapus who can manage the symptoms of lupus so well, so that she looks like a healthy person (quiescent). Increased intensity of exposure to the trigger

factors will surely cause lupus symptoms more often. In anticipation of this, odapus need to have adequate sensory knowledge about lupus and high self-efficacy in order to facilitate preventive action toward trigger factors and self-care practice at home. The goal is odapus can achieve a high HRQOL. The correlation between sensory knowledge, self-efficacy, preventive action towards trigger factors and self-care practice with HRQOL in odapus remains unclear.

Lupus has suffered by at least five million people worldwide. Lupus can affect men and women at any age, but 90% of those diagnosed with lupus are women and lupus prone age is 15-44 years old. 70% of lupus

cases is SLE (Systemic Lupus Erythematosus) (S.L.E. Lupus Foundation, 2012). In Indonesia, the estimated number of people with lupus are about 200-300 thousand people, the trend is increasing every year, the ratio of male and female is 1:6-10 (Yayasan Lupus Indonesia, 2012; Utomo, 2012).

Trigger factors of lupus symptoms such as pregnancy, stress, fatigue, exposure to sunlight and chemical substances (Cooper, *et al.*, 2010). Frequent symptoms reported by odapus are fever, skin rash (photosensitive), joint swelling/ pain, weakness/fatigue, and kidney disorders (NIAMS, 2012). Renal, neurological and haematological complications are the most often found in odapus (Kannangara, *et al.*, 2008). As a result, lupus proven to reduce odapus HRQOL significantly, such as depression by 8-44% (Jarpa, *et al.*, 2011), infertility (Baker, *et al.*, 2009), limitations in daily activity especially when joint pain relapse (McElhone, *et al.*, 2010), environment withdrawal (Seawell & Danoff-Burg, 2005) discrimination, difficulties in finding jobs, changes in interpersonal relationship (de Barros, *et al.*, 2012), obstacles in social roles (Wahyuningsih, *et al.*, 2013).

Odapus need to have a high sensitivity to what was going and aware of the impact in many areas of life. Lupus symptoms that arise from time to time have the potential to interfere with daily activities and cause many other problems. In order to achieve optimal health status and high HRQOL odapus must be proactive in managing lupus. One way is to adopt healthy behaviors and manage lupus independently through preventive action towards trigger factors and self-care practice. This study aimed to analyze the correlation between sensory knowledge, self-efficacy, preventive action towards trigger factors and self-care practice with HRQOL in odapus.

METHODOLOGY

This is a cross-sectional study mixing the model of Self-Care (Orem, 1971) and Precede Proceed (Green & Kreuter, 1991). Population was all lupus patients doing regular check up in a Rheumatology Unit of one big public hospital in East Java, by period of October-December, 2014. Sample was determined by inclusion criteria: pure lupus (code: M32), adult women (19-44 years old), disease duration at least 6 months, at least high school graduated, monthly income at least

minimum wage. Exclusion criteria: lupus with complication (code: M32.0,M32.1,M32.9), experiencing mental disorder and/or psychological disturbance (depression, anxiety, burned out), resigned and/or hospitalized by the time of study, refusing home visit, rejecting informed consent, working as health care professional. Sample size was 36 chosen by total sampling.

Independent variables: sensory knowledge, self-efficacy, preventive action towards trigger factors and self-care practice; dependent variable: HRQOL. Researcher developed her own instrument for measuring all independent variables, namely ODAPUS-HEBI which consists of four parts. Instrument testing in 18 odapus proved that ODAPUS-HEBI was valid and reliable by result: 1) sensory knowledge: $r=0.477-0.774$; $\alpha=0.519$; 2) self-efficacy: $r=0.503-0.903$; $\alpha=0.927$ (high reliability); 3) preventive action towards trigger factors: $r=0.547-0.908$; $\alpha=0.945$ (high reliability); 4) self-care practice: $r=0.470-0.885$; $\alpha=0.949$ (high reliability). Dependent variable was measured by LUPUS-PRO (Jolly, *et al.* 2012). This instrument assesses quality of life specifically in odapus, consist of 42 items. Instrument testing in 25 odapus proved that LUPUS-PRO WAS valid and reliable ($r=0.408-0.764$ and $\alpha=0.803$; high reliability). Data analysis was started with normality and linearity test then regression test; $\alpha \leq 0.05$. Ethical concern: informed consent, anonymity and confidentiality.

RESULT

36 respondents participated in this study. Mostly late adulthood (44.4%) who was married (77.8%) and lived with spouse (77.8%). Respondents were mostly high school graduated (83.3%) working as entrepreneurs (33.3%) and private employees (33.3%) with independent income of more than Rp. 1.5 to 2 million per-month (33.3%). Disease duration was mostly 1-2 years (33.3%). Arthritis was reported as the most frequent lupus symptom (61.1%) and fatigue was mostly reported as trigger factor (66.7%).

All respondents was categorized as stable according to indicators in Ferenkeh-Koroma (2012) and mild lupus according to PRI indicators (2011). They were rarely experienced lupus flare, 16.7% with skin rash and 5.6% with chest pain in deep breathing. Respondents usually meet health personnel

during her routine control and other respondents have a personal physician. Methylprednisolone and Cyclosporine were identified as the most frequent to be consumed. Dias & Isenberg (2014) found in mild lupus, the joint is the primary organ affected. Gordon (2013) argues that fatigue is the originator of the most common lupus symptoms. These matched to the study result.

All data were normally distributed ($p=0.674$). Only sensory knowledge found to be linear with HRQOL ($p=0.299$), then tested by simple linear regression; while the other variables were tested by nonlinear regression. Sensory knowledge proved to be correlated with HRQOL in odapus ($r = 0.344$ and $p = 0.040$); it affected HRQOL by 11.8%, while the remaining 88.2% is influenced by unidentified factors. Self-efficacy, preventive action and self-care practice were proved to have no correlation with HRQOL in odapus ($p=0.212$; $p=0.130$; $p=0.053$ respectively).

DISCUSSION

1. Sensory Knowledge and HRQOL

Sensory knowledge was identified as the only independent variable that has a linear correlation with HRQOL in odapus. Study results showed that only 66.7% from 72.2% respondents who possess high knowledge and perform self-care optimally at home. The resulting correlation coefficient is quite low ($r=0.344$). Knowledge has been identified specifically in the domain of health behaviors specifically in predisposing factors affecting individual HRQOL indirectly (Green & Kreuter 1991). This is consistent with study result showing that knowledge affecting HRQOL in odapus by 11.8% only; a value that is less representative.

Thumboo & Strand (2007) concluded that knowledge of lupus is one of the factors proved to be associated with HRQOL in odapus. Other factors are age, disease duration, educational status, disease activity, organ damage, self-efficacy, social support / psychosocial factors, the use of corticosteroid/cytotoxic agents and specific manifestations such as kidney failure or fibromyalgia.

Mancuso, *et al.* (2010) in the study of asthma stated that the cognitive variables such as knowledge, attitude, and self-efficacy can affect asthmatic client ability to be an effective self-manager. Being able to be an effective

self-manager is very important in the process of managing chronic disease at home.

Most respondents proved to have high knowledge about lupus. This could be used as a basis for building commitment in lupus management at home. The positive correlation between sensory knowledge and HRQOL proved that knowledge about lupus as a chronic disease has a little more influence on HRQOL through subjective perception. Knowledge can affect the living standard set individually, in which this variable was not measured in this study because of instrument limitation (LUPUS-PRO).

2. Self-efficacy and HRQOL

This study result showed that self-efficacy is not correlated with HRQOL in odapus. Self-efficacy was proved to be nonlinear with HRQOL; 61.1% respondents who have high self-efficacy possess non-optimal HRQOL. This has led to statistically insignificant correlation between self-efficacy and HRQOL. Self-efficacy potentially associated with the specified individual standard of life which is closely related to general quality of life. This living standard was not measured because of instrument limitation. The feelings can control the disease is able to give satisfaction to odapus and potentially could improve the perceived HRQOL significantly.

3. Preventive Action towards Trigger Factors and HRQOL

The study result indicated that preventive action towards trigger factors uncorrelated to HRQOL in odapus. Preventive action towards trigger factors proved to be nonlinear with HRQOL; 77.8% respondents who took optimal preventive action possess non-optimal HRQOL. This has led to statistically insignificant correlation between preventive action and HRQOL. No correlation identified potentially due to high living standard set by respondent

In this study, the identified trigger factor of lupus includes physical stress (mostly), emotional stress, sunlight, irregular meal time, lack of sleep and hormonal changes. Respondents find it difficult to keep her body from fatigue due to work or carry out her role as a mother who must manage the household chores. Regarding physical stress, respondents expressed some difficulties in preventing exposure due to high role demands, because of self-limitation, limited resources

and lack of family support. Other trigger factors which considered hard to prevent: emotional stress (depend on coping mechanisms), sunlight (depend on activity), etc.

4. Self-care Practice and HRQOL

Study results showed that self-care practice uncorrelated to HRQOL in odapus. Self-care practice proved to be nonlinear with HRQOL; 72.2% respondents perform optimal self-care practice but possess non-optimal HRQOL. This has led to statistically insignificant correlation between self-care practice and HRQOL. Self-care practice can be promoted as an alternative for managing lupus in community context though, mainly because of the high involvement of odapus in disease management process.

Study limitations: 1) varied demographic characteristic; 2) retrospective survey allows emerging doubts; 3) cross-sectional design also has drawback/bias; 4) internal consistency and content validity of ODAPUS-HEBI should be tested in larger clinical trial; and 5) there is no instruments measuring HRQOL specifically in lupus patients which contains items examined the individual living standards.

Psychological status, level of independence, social relationship, social determinants (employment, housing, education), culture, shared values and spirituality should be investigated also in conjunction with sensory knowledge and self-efficacy because all of these variables can affect individual overall HRQOL. Motivation and self-awareness should be examined also in conjunction with self-efficacy for these three variables potentially affecting self-care practice in odapus, especially in community context.

CONCLUSION

Sensory knowledge correlated with HRQOL in odapus and affects it by 11.8%. Self-efficacy, preventive action towards trigger factors and self-care practice have no correlation with HRQOL in odapus.

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PREVENTING CARDIOVASCULAR COMPLICATIONS BEHAVIORS IN ELDERLY WITH POORLY CONTROLLED TYPE 2 DIABETES MELLITUS IN INDONESIA

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ABSTRACT

Background: Preventing cardiovascular complications behaviors is the cornerstone in Elderly with poorly controlled type 2 DM to prevent CVD complications. **Purpose:** To describe the prevention cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM in Cilegon City, Indonesia. **Methods:** A quantitative descriptive study to describe the preventing cardiovascular complications behaviors of 60 Elderly with poorly controlled type 2 DM who met inclusion criteria. These patients were selected by using random sampling assignment from Elderly Health Care Unit, Public Health Center, Cilegon City, Indonesia. Preventing cardiovascular complications behaviors was measured by using the preventing cardiovascular complications behaviors questionnaire (PCCBQ). The PCCBQ was modified from a previous study and with adequate reliability (Chronbach's alpha was .88). **Results:** The subjects who participated in this study were Elderly more than 60 years. More than half of the subjects were female (75%) who had been studied in the elementary school (51.7%). The majority of the patients had no experience of any previous structural educational program or counseling program related to the preventing cardiovascular complications behaviors (96.7%). The result showed a moderate level of preventing cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM (Min-Max= 24-91, M= 58.43, SD= 13.68). **Discussion:** CVD complications are common DM complications in the Elderly with poorly controlled type 2 DM. The level of preventing cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM is moderate. This is due to some of Elderly have experience related to health behaviors including unstructured educational program at the Eldery Health Care Unit, self-learning, family support, belief and perceptions. **Conclusion:** The level of preventing cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM was moderate level. Two subscales of preventing cardiovascular complications behaviors including physical exercise and taking medications regularly were at a low level, whereas the DM diet and heart healthy diet and smoking cessation were at a moderate level.

Key words: preventing cardiovascular complications behaviors, elderly, poorly controlled type 2 DM, Indonesia.

INTRODUCTION

Background

Diabetes mellitus (DM) is a worldwide health problem. The prevalence of type 2 DM in the elderly was increase each year and will reach 2 billion people in 2050 (Kowal et al., 2012; Michalakis, Goulis, Vazaiou, Mintziori, Plymeris, & Abrahamian, 2013). The high prevalence of diabetes is associated with poor glycemic control in elderly with type 2 DM (Omar & San, 2014). Poorly controlled type 2 DM in the Elderly is defined when HbA1c

level > 7 % (Otiniano, AlSnih, Goodwin, Alghatrif, & Markides (2012) or equal to fasting blood glucose (FBG) level \geq 154 mg/dL (Inzucchi, 2012).

Patient with type 2 DM who have HbA1c > 7 % is increased to DM complications including CVD complications (Imran, Rabasa-Lhoret, & Ross, 2013). A study conducted by Al-Nozha, Mojadadi, Mosaad, and El-Bab (2012) reported that prevalence of CVD complications in patient with type 2 DM was 5.5 % in Kingdom of

Saudi Arabia. Another study conducted by Bonakdaran, Ebrahimzadeh, and Noghabi (2011) reported that 21.8 % in Republic of Iran, 72 % in Rusia and 21 % in China. Currently, in Cilegon Indonesia there was 48 % of elderly with diabetes who have CVD complications (Arriadna, 2015).

CVD complications in the Elderly with poorly controlled type 2 DM occurred due to Elderly are more common to develop endothelial dysfunction, oxidative stress, and inflammation (De Tata, 2014). Furthermore, endothelial dysfunction can influence on increasing FBG and lipid profiles (e.g., total-cholesterol, HDL-cholesterol, and LDL-cholesterol). Therefore, Elderly with poorly controlled type 2 DM should manage their life style by preventing cardiovascular complications behaviors including DM diet and heart healthy diet, physical exercise, taking medications regularly, and smoking cessation (Sung, 2015) and they have to control their blood glucose and lipid profiles routinely to prevent CVD complications.

Various studies related to DM and chronic complications in Elderly in Indonesia have been conducted (Nazir, 2009; Rosyada and Trihandini, 2013; Yuliani, Oenzil, & Iryani, 2014). However, these studies were focused on DM complications generally, not specific in preventing CVD complications and it was not specific in Elderly population with poorly controlled type 2 DM, so the results may not be generalized to other settings in Indonesia. Therefore, the researcher needs to describe the preventing cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM in Cilegon, Indonesia.

Objective

The objective of this study was to describe the prevention cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM.

METHOD

Setting

The patients of this study have been selected from two Elderly Health Care Units at Public Health Center in Cilegon City, Banten Province, Indonesia during January December 2015 to January 2016.

Sample

Sixty Elderly with poorly controlled type 2 DM were recruited by random sampling

assignment based on inclusion criteria. The inclusion criteria was Elderly with age ≥ 60 years, fasting blood glucose ≥ 154 mg/dL in the past 3 months after fasting at least 8 hours or HbA1c level > 7 % with the duration of diabetes at least 1 year, be able to communicate in Indonesian language both verbal and written, have no hearing impairment, have family member who stay together with elderly, have no mental health problems as recorded in in the Elderly medical record.

Data collection instruments

Demographic Data Questionnaire and Health Information (DDQHI). This DDQHI was completed by filling in the blank form. The demographic data was consisted of 10 items including patient's age, gender, occupation, education level, family income, family member, education experience, patients' belief, performing exercise, and taking medication history, whereas the health information consists of 9 items including BMI status, the last of total-cholesterol levels, HDL-cholesterol levels, LDL-cholesterol levels, FBG levels, blood pressure levels, duration of diabetes, smoking status, and current medications.

The Preventing Cardiovascular Complications Behaviors Questionnaire (PCCBQ). This instrument was modified based on existing tools by Pamungkas (2015). It was used to measure preventing cardiovascular complications behaviors which consists of 4 dimensions, including DM diet and heart healthy diet (9 items), physical exercise (7 items), taking medications regularly (4 items), and smoking cessation (5 items). Each item was measured by using a six point (0-5) Likert scale in which:

- 0 = not applicable (NA) (only for smoking cessation items for elderly who do not have experience with smoking),
- 1 = Never
- 2 = Seldom
- 3 = Occasionally
- 4 = Often
- 5 = Repeatedly

The total score is from 20 – 125. The scoring system is divided into three categories: low behavior scores (score 20-54), moderate behavior scores (score 55-89), high behavior scores (core 90-125) with the highest score indicating better for preventing cardiovascular complications behaviors.

Ethical consideration

This study has been approved by the IRB of the Faculty of Nursing, Prince of Songkla University, Thailand. Permission letters were also obtained from the Head of Health Departement and the Head of Cilegon Public Health Center, Banten Province, Indonesia. The researcher explained the purposes of the study, procedures, risks, and benefits of the study. Furthermore, they had been assured that they had the right to refuse to participate in this study at anytime without any negative consequences. They were given a brief explanation about the study and informed consent form before they determine to participate in the study. The confidentiality and anonymity of the patients were maintained throughout the study.

Data Analysis

Descriptive statistics were used in this study to describe the subjects' demographic, health information related to characteristics, and preventing cardiovascular complications behaviors in terms of frequency, percentage, mean, and standard deviation.

RESULTS

Demographic Characteristics

A total of sixty patients were selected in the study. The demographic characteristics of the Elderly with poorly controlled type 2 DM are presented in Table 1. According to the data, the subjects who participated in this study were Elderly with age of 60-65 years (83.3%). More than half of the subjects in this study were female (75%). Most of the subjects in this study were housewife (66.7%). In terms of education levels, more than half of the subjects had an education level of elementary school (51.7%). More than one third of subjects had family income less than IDR 1,700,000 per month (46.7%). More than half of the subjects had children who taken care the Elderly (68.3%). The subjects had no experience with any previous educational programs or counseling programs related to prevention cardiovascular complications behaviors (96.7%). The subjects had no belief regarding DM diet in their daily life (75%). More than half of the subjects never perform physical exercise regularly in a week (71.3%), and most of the subjects had history of taking medications regularly (60%).

Table 1: Demographic characteristics of the Elderly with poorly controlled type 2 DM in Cilegon, Indonesia (N=60)

Characteristics	M (SD)	N	%
Age (Elderly)			
60-65		50	83.3
66-70		8	13.3
> 70		2	3.3
Gender			
Male		15	25
Female		45	75
Education levels			
Do not have experience in formal school		6	10
Elementary school		31	51.7
Junior high school		6	10
Senior high school		13	21.7
Diploma degree		3	5
Bachelor degree		1	1.7
Family income			
IDR < 1,700,000 per month		28	46.7
IDR 1,700,000 per month		11	18.3
IDR >1,700,000 per month		21	35
Family member who taking care Elderly			
Husband or wife		15	25
Children		41	68.3
Husband or wife and children		4	6.7
Education experience about preventing cardiovascular complications behaviors			
Yes		2	3.3

No	58	96.7
Belief regarding DM diet		
Yes	36	60
No	24	40
Performing exercise		
Never exercise in a week	43	71.7
1 time a week	8	13.3
2 times a week	8	13.3
More than 2 times a week	1	1
Taking medications		
Regularly	36	60
Sometimes (if remember)	24	40

According to the clinical characteristics of the Elderly with poorly controlled type 2 DM in Cilegon, Indonesia (N=60) as shown in Table 2, the findings of this study reported that the average of last total-cholesterol level was 188.77 mg/dL (SD = 23.56), the last HDL level was close to normal level 47.88 mg/dL (SD = 7.07), the last LDL-cholesterol level was 79.12 mg/dL (18.58%), and the average of the last FBG level was high 191.90 mg/dL (SD =

32.59). Nearly a half of the patients had the last blood pressure < 150/90 mmHg (40%). The duration of the Elderly being diagnosed with diabetes mellitus was more than one year (100%). Most of the subjects in this study were never smoking (76.7%). More than half of current medications of patients were metformin, simvastatin, and amlodipine (38.3%).

Table 2: Clinical characteristics of the Elderly with poorly controlled type 2 DM in Cilegon, Indonesia (N=60)

Characteristics	M (SD)	N	%
The last total-cholesterol level (Min-Max = 120-233 mg/dL)	188.77 (SD = 23.56)		
The last HDL-cholesterol level (Min-Max = 31-67 mg/dL)	47.88 (SD = 7.07)		
The last LDL-cholesterol level (Min-Max = 45-120 mg/dL)	79.12 (SD = 18.58)		
The last FBG level (Min-Max = 154-248 mg/dL)	191.90 (SD = 32.59)		
The last blood pressure level			
< 150/90 mmHg		24	40
150/90 mmHg		18	30
> 150/90 mmHg		18	30
Duration of diabetes mellitus			
> 1 year – 5 years		45	75
> 5 years – 10 years		10	16.7
> 10 years		5	8.3
Smoking status			
Never smoking		46	76.7
Stop smoking < 1 year ago		1	1.7
Stop smoking 1-2 years ago		0	0
Stop smoking > 2 years ago		7	11.7
Active smoking		6	10
Current medications			
Metformin		17	28.3
Metformin and amlodipine		15	25
Metformin and simvastatin		5	8.3
Metformin, amlodipine, and simvastatin		23	38.3

Preventing Cardiovascular Complications Behaviors

Table 3 shows the mean, standard deviation (SD), and the levels of preventing cardiovascular complications behaviors (N=60). Regarding the data, the total level of preventing cardiovascular complications

behaviors of the subjects were at moderate levels (M = 58.43, SD = 13.68). DM diet and heart healthy diet and smoking cessation were at the moderate level. However, physical exercise and taking medications regularly were at the low level.

Table 3. Mean, standard deviation (SD), and the levels of preventing cardiovascular complications behaviors

No	Characteristics	Possible score	Min-Max score	Mean	SD	Level
1.	DM diet and heart healthy diet	9-45	24-44	32.88	4.51	Moderate
2.	Physical exercise	7-35	7-35	15.28	8.13	Low
3.	Taking medications regularly	4-20	4-20	8.92	3.18	Low
4.	Smoking cessation	0-25	0-25	1.68	5.21	Moderate
5.	Total of preventing cardiovascular complications behaviors	20-125	24-91	58.43	13.68	Moderate

DISCUSSION

The findings of this study revealed that the level of preventing cardiovascular complications behaviors was a moderate level. The subscale of DM diet and heart healthy diet and smoking cessation are at moderate level. These are occurred due to most of Elderly in this study are female, it is associated with cultural aspect in Cilegon City where most of people in Cilegon City have belief that females who smoking are not good and have bad attitude, whereas the subscales of physical exercise and taking medications regularly are at low level. These are associated with physical and cognitive dysfunction in the Elderly. It is consistent with study was conducted by Gates and Walker (2014) reported that Elderly with diabetes mellitus are associated with functional changes.

The improvement of preventing cardiovascular complications behaviors was due to several reasons such as: The first reason related to informal and unstructured educational program in the Elderly Health Care unit at Public Health Center. Elderly Health Care unit at Public Health Center in Cilegon, Indonesia provides brief information regarding DM complications generally. It might improve the patients' knowledge. Therefore, the Elderly can determine on the best management to prevent DM complications behaviors. However, Elderly Health Care unit did not provide some materials regarding how to prevent specific DM complications including CVD complications such as a book, leaflet, and flipchart. This finding was consistent with Nazir (2009) stated that the increasing of knowledge was associated with management to prevent DM complications.

The second reason is the Elderly have been diagnosed with diabetes more than 1 year. It might develop their self-learning and they have more experience to manage their disease

including preventing cardiovascular complications. Therefore, after the Elderly had been diagnosed with diabetes mellitus for enough long time, they can manage their behaviors to prevent CVD complications by performing DM diet and heart healthy diet, physical exercise, taking medication regularly, and smoking cessation. This finding was consistent with Omar & San (2014) stated that long duration of diabetes was associated with improving knowledge and more experience regarding DM management.

The third reason may relate to the social support especially from family support. The family provides direct support to the patient and has benefit to the self-management (Xu, Toobert, Savage, Pan, & Whitmer, 2008). Most theories of health and behavior change suggest a need for social support as a crucial component, family members are the most significant source of that support (Kang et al., 2010). Support from family member to the Elderly, for instance to encourage the Elderly to eat healthy food by helping to prepare foods, remind the Elderly to eat in proper time, accompany the Elderly to perform physical exercise, assist and remind the Elderly to take medicines properly, and motivate to perform health behaviors. Therefore, Elderly who have family support is strongly associated in term of diabetes mellitus treatment to prevent its complications, including cardiovascular disease (Nicklett, & Liang, 2010).

The fourth reason is related to the belief and perception regarding the management for preventing cardiovascular complications behaviors. Health Belief Model Theory stated that the behaviors of the patients were associated with the seriousness of their disease, perception of the advantages and barriers of behavioral change (Rosenstock, Strecher, & Becker, 1998). The result of this study showed that the majority of the patients understand

regarding the preventing cardiovascular complications behaviors especially in DM diet.

In contrast, the result showed that patients had low levels of physical exercise and taking medications regularly. These findings might be due to the Elderly have special need to perform physical exercise, it was associated with functional changes caused by aging (Choi, Jang, & Nam, 2008) and it will impact on limitation of movement. Also, diabetes in Elderly is metabolically different from diabetes in younger patient populations. Therefore, approach to therapy needs to be different in this age group (5). Elderly with diabetes has been linked with cognitive dysfunction (Gates & Walker, 2014). These conditions might be influence to medication adherence in the Elderly.

CONCLUSION AND RECOMMENDATION

Conclusion

The preventing cardiovascular complications behaviors in the Elderly with poorly controlled type 2 DM in Cilegon, Indonesia were at moderate level. Regarding the subscales of the preventing cardiovascular complications behaviors, DM diet and heart healthy diet and smoking cessation were at moderate level. These are happened related to unstructured educational program, patients' self-learning, family support, and patients' beliefs. However, physical exercise and taking medications were at low level which might relate to the functional changes including physical and cognitive dysfunction.

Recommendations

CVD complications are a common DM complications in the elderly with poorly controlled type 2 DM. To prevent CVD complications in the Elderly with poorly controlled type 2 DM, health care persons need to pay more attention on promoting exercise and adherence to taking medications and several factors should be considered in order to further research was needed to establish an intervention approach related to preventing cardiovascular complications behaviors to prevent CVD complications in the Elderly with poorly controlled type 2 DM.

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FATIGUE AS DOMINANT FACTOR ASSOCIATED WITH QUALITY OF LIFE HEMODIALYSIS'S PATIENT

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ABSTRACT

Introduction: The increase number of patients with Chronic Kidney Disease (CKD) and the need for hemodialysis would need good treatment and management patients with CKD. So, quality of life patient with CKD can extend and improved. Quality of life is a situation where someone having trouble satisfaction in daily life enjoyment. Quality of life is an important indicator for health care and can measure effectiveness of handling CKD itself. This study aimed to explored quality of life and related factor in quality of life. **Method:** This study used cross sectional design with total samples of 84 adults. Data analysis done by using a correlation regression analysis and independent t test. The dominant factor was determined used linear regression double. **Result:** The result shown that there was no a significant different between age, during hemodialysis, serum albumin, gender, education, jobs, and marriage with quality of life. There is a significant relationship between fatigue and quality of life of hemodialysis patient. **Discussion:** This study recommend unit hemodialysis would care fatigue's problem and develop specific intervention to reduced fatigue.

Key words : hemodialysis, fatigue, quality of life

HIV/AIDS-RELATED STIGMA PREVENTION AMONG NURSING STUDENTS

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ABSTRACT

Introduction: Studies have found that most people would keep away from people who are identified as HIV-positive. HIV/AIDS-related stigma is presented mainly because of its correlation with the marginalized groups and its infection process, diseases and death. The stigma of HIV/AIDS can cause some negative effects for people living with HIV/AIDS; discrimination, loss of jobs, violence, particularly in health care setting which can cause a major problem to the delivery of care even by the health workers, especially nurses. Nursing students would become practitioner nurse who would face and service people living with HIV/AIDS in the future, it would be very essential during their training in the college to prepare them to not discriminate and stigmatize the patients with HIV/AIDS. The purpose of this study was to review the potential interventions that have been applied for nursing students to prevent them in stigmatizing people with HIV/AIDS in caring context. **Method:** A literature review was conducted, searched through databases include MEDLINE, PubMed, and ProQuest from 2005-2016 based on this concept. **Results:** Four interventions were identified effectively prevent and reduce HIV/AIDS-related stigma among nursing students; combined program of knowledge and contact with PHA (knowledge-contact), brief stigma-reduction curriculum, body mapping as an educational tool, and team awareness seminar model. **Discussion:** Although several studies verified intervention in preventing HIV/AIDS-related stigma effectively, it is still needed to keep on searching and examining other possible interventions in different setting particularly in ASEAN countries.

Keywords: HIV/AIDS-related stigma, prevention, nurses, nursing students

INTRODUCTION

The number of people living with HIV worldwide continues to increase. It was estimated 36.9 million (34.3 million–41.4 million) people living with HIV by the end of 2014 globally (UNAIDS, 2015). In Indonesia, since the first report of AIDS case in Bali in 1987 the number of cases escalated steadily up to a total of 3,431 in 2005. By the end of 2014, Directorate General CDC & EH Ministry of Health, Republic of Indonesia reported that total number of HIV/AIDS had reached 206,095 with 40,216 of these cases were happened among productive ages (20-49 years). More than half of AIDS cases (67%) were among the risky group of heterosexual. Second group in term of risky acquisition were injecting drug users with a total of 8,462 cases (Ditjen PP & PL Kemenkes RI, 2014).

HIV infection is a chronic and manageable illness, which is usually

considered as behaviorally caused illness. It is often thought that the HIV-positive people did something immoral or acts in a wrong way which allowed them to get the virus. Therefore, people make opinion about the cause of how people got infected HIV (Philip, Chadee, & Yearwood, 2014). Studies have found that most people would keep away from people who are identified as HIV-positive, and it will lead them to stigmatizing those living with HIV/AIDS (Varni, Miller, & Solomon, 2012).

HIV/AIDS-related stigma is presented mainly because of its correlation with the marginalized groups (e.g. sex workers, homosexual, IDU) and its infection process, diseases and death. The stigma of HIV/AIDS can cause some negative effects for people living with HIV/AIDS; discrimination, loss of jobs, violence, particularly in health care setting which can cause a major problem to the delivery of care even by the health workers,

especially nurses. Advancing in care and treatment to people living with HIV infection does not guarantee that they will not be stigmatized for the rest of their life (Varni et al., 2012; Florom-Smith & Santis, 2012). Understanding about the nature of HIV/AIDS-related stigma need to be developed in order to reduce the negative effects (Chan, Stoové, Sringernyuang, & Reidpath, 2008).

All nations agreed and committed to end the AIDS epidemic by 2030 through the Sustainable Development Goals (SDGs). This is a golden chance for the AIDS response, where the world is constructing momentum achieving a sustainable, reasonable and healthy future for all. The pilot scheme to reach the goal which is allied to the SDGs is “the UNAIDS 2016-2021 Strategy” and it contains ten targets. The number eight of these 10 targets is “90% of people living with, at risk of and affected by HIV report no discrimination, especially in health, education and workplace settings” (UNAIDS, 2015). However, still stigma is a repeated challenge related to HIV testing, care and prevention, and it may be resulted other difficulties because of its effect among persons in different high-risk groups (Florom-Smith & Santis, 2012).

The major contact for HIV/AIDS care and treatment is the health sector (e.g., clinics, health centers, hospitals), and of course PLWHA will face the health providers including nurses. Stigmatization may be occurred throughout health care providers where they avoid to make direct contact with the PLWHA. When nurses and other health care providers develop unfriendly responses to PLWHA, it will lead to the barrier in the effectiveness of HIV care and treatment. Studies found that a significant number of health care professionals and health care students including nursing students possess stigmatizing attitude which result negative effect on their willingness and commitment to provide care and interaction with PLWHA. Refusing health care and keeping HIV patients away from others, represent attitude of HIV-related stigma showed by nurses and other health care providers (Philip et al., 2014).

Past researches identified that some nurses and nursing students were unenthusiastic to provide care and treatment for PLWHA with the main reason is fear of contagion, that is the reason why the attitudes of both nurses and nursing students toward

PLWHA have long been examined and evaluated (Pickles, King, & Belan, 2009). This review focused only on nursing students since they would become practicing nurses in the future and are most likely contacted to caring for those who are living with HIV/AIDS (Farotimi, Nwozichi, & Ojediran, 2015). During their educational program in collage of nursing school, it is very crucial moment to provide nursing students interventions to access the knowledge, attitude and practice to enable them delivering safe, high quality care to PLWHA and prevention of HIV/AIDS-related stigma and discrimination. This paper reviews the potential intervention approaches that have been applied for nursing students to prevent them in stigmatizing people with HIV/AIDS in caring context.

METHOD

There were three computerized databases operated as identification resources: MEDLINE, PubMed, and ProQuest database. We systematically searched studies that published from 2005 to February 2016 which implemented particular interventions in preventing nursing students stigmatizing PLWHA. In order to obtain the related articles, we combined some keywords; HIV/AIDS, HIV-related stigma, AIDS-related stigma, people living with HIV/AIDS, nurses, nursing student with the Boolean operator “and” and “or”.

The criteria used for study selection were: intervention among nursing students handling for people with HIV/AIDS, stigma prevention and or reduction, original studies, published in English language, and no limitation where the studies conducted. Studies which include other health care students were excluded. Furthermore we also eliminate the review studies for the review process. Three reviewers (AR, DW, and RP) investigated every titles and abstracts identified by those three databases search. Each investigator applied inclusion and exclusion criteria to judge the eligibility of the studies found.

Our search yielded 178 publications. During searching process, we had modified the keywords entering through databases including the order, single and double words, and using of Boolean operator as well. It was assumed that the primary study about this theme was still limited. Screening both titles and abstracts were conducted to ensure whether the articles

met specified criteria above. There was four eligible studies which were matched with study criteria and reviewed in this study, and the findings of this review study were based on those selected studies.

RESULTS

Four journal articles met all inclusion and exclusion criteria, and the study reports were from Hong Kong, India, Canada, and the US (Table 1). All the studies were published in English in between 2010-2014. Each of investigators (AR, DW and RP) appraised these four articles independently and finally combined the results in final discussion.

There was only one study which comparing single intervention with combined intervention, that was AIDS knowledge-only program compared to combined program of knowledge and contact with PHA (knowledge-contact). The other three studies investigating single intervention in preventing the stigmatization among nursing students toward PLWHA including: brief stigma-reduction curriculum, body mapping as an educational tool, and team awareness seminar model.

DISCUSSION

Several essential findings have emerged from this review study of intervention to prevent and reduce stigmatizing attitude among nursing students. This review study reported four types of HIV/AIDS-related stigma preventing intervention: knowledge-contact intervention, brief stigma-reduction

curriculum, body mapping as an educational tool, and team awareness seminar model. In order to make final decision and produce policy, it still need to examine the findings carefully.

AIDS knowledge-only program content of teaching AIDS knowledge and infection control skills. As the result it had impact on increasing of AIDS knowledge and acceptance people living with HIV/AIDS, but it did not degrade stigmatizing attitude and feeling of contracting HIV. However, combined program of knowledge and contact with PHA (knowledge-contact) intervention were significantly effective program in reducing stigmatizing attitudes among nursing students toward PHA. Contact means interaction with individual or groups being stigmatized because of HIV/AIDS (Mahat & Eller, 2009).

Brief stigma-reduction curriculum showed promising intervention in reducing stigmatizing attitudes among nursing students toward PLWHA. After accepting the curriculum, students' knowledge related to HIV was higher and reduced HIV/AIDS-related stigma. The students realized this curriculum application would change the way they care PLWHA and suggest their friends join the course provided. (Lohrmann & Välimäki, 2000) concluded students who have positive attitude toward PLWHA have more willingness to deliver care.

Table 1. A Summary of Research on HIV-Related Stigma prevention among nursing students

Author	Aim	Intervention	Country	Results
(Yiu, Mak, Ho, & Yu, 2010)	Comparing knowledge-only program with knowledge-contact on nursing students' attitudes, behaviors, and emotions towards PHA	AIDS knowledge-only program vs combined program of knowledge and contact with PHA (knowledge-contact)	Hong Kong	Knowledge-contact program was significantly greater than knowledge program in reducing stigmatizing attitudes among nursing students toward PHA.
(Shah, Heylen, Srinivasan, Perumpil, & Ekstrand, 2014)	(a) assess the acceptability and feasibility of a brief stigma-reduction curriculum among Indian nursing students and (b) examine the preliminary effect of this curriculum on their knowledge, attitudes, and intent to discriminate	Delivering brief stigma-reduction adapted from the ICRW curriculum and delivered in English	India	This brief intervention resulted in decreased stigma levels and was also highly acceptable to the nursing students
(Maina, Sutankayo,	Applying body mapping as an educational tool,	Applying body mapping as an	Canada	The body mapping exercise as an educational can be a valuable tool

Chorney, & Caine, 2014)	including a nursing student, an expert facilitator, a PHA and a course professor.	educational tool			for HIV education for first year nursing students.
(Cadiz, O'Neill, Butell, Epeneter, & Basin, 2012)	Evaluated the effectiveness of an educational intervention, addressing nurse impairment, for addressing nursing students' knowledge acquisition, changes in self-efficacy to intervene, and changes in substance abuse stigma	Team awareness seminar model	USA		Seminar (with Team Awareness) significantly affected knowledge and self-efficacy to intervene but did not significantly affect stigma.

Reflecting the role of body mapping, students were placed in a position to appreciate and accept another, accept the differences and challenge between persons, moreover it changed attitude in HIV-related stigma. Body mapping as an educational tool will be very useful to increase new knowledge and skills in dealing with HIV/AIDS. Negative attitudes towards PLWHA can affect with the quality of nursing care and can cause anxiety to nurses and patients (Bektaş & Kulakaç, 2007)

Team awareness seminar model influenced the knowledge and self-efficacy, however it did not affected the stigma. Educational program which was based on evidence must play a crucial role in order improving teaching strategies to facilitate nursing students understand and overcome negative attitudes in HIV/AIDS-related stigma (Pickles et al., 2009)

LIMITATIONS

Some limitations were identified during analysis of the integrative review of the literature on HIV/AIDS-related stigma prevention among nursing students. First, difficulties to access the full text version from operated databases which result minimum resources. Second, the investigators ability in combining searching method during literature searching, and it lead to the limit in number of studies which might meet the criteria. The last identified limitation was the number of databases that investigators can access freely that caused the boundary to the broader sources.

CONCLUSION AND RECOMMENDATION

An integrative review of the literature was done to filter intervention in preventing and reducing HIV/AIDS-related stigma among

nursing students effectively. Several studies verified intervention in preventing HIV/AIDS-related stigma such as: knowledge-contact intervention, brief stigma-reduction curriculum, body mapping as an educational tool, and team awareness seminar model. Although some interventions are effective in application, still it is needed to keep on searching and examining other possible interventions in different setting particularly in ASEAN countries.

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INTRADIALYSIS EXERCISE INCREASING THE HEMODIALYSIS ADEQUACY ON CHRONIC KIDNEY DISEASE PATIENTS

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ABSTRACT

Introduction: Hemodialysis is treatment to replace the excretion function of kidney, a live saving treatment for patient with chronic kidney disease (CKD) at the end stage condition of kidney disease. The effectiveness of hemodialysis in giving back the oxygenated blood in to the body is called as hemodialysis adequacy. Intradialysis Exercise is an alternative intervention to increase hemodialysis adequacy. This study was purposed to examine the effect of Intradialysis Exercise in increasing the hemodialysis adequacy in terms of : body weigth, ureum level, intradialysis blood pressure, post dialysis blood pressure and pulse . **Method:** This research was a quasy - experimental study with pre-post test design. Using simple random sampling technique, 64 eligible hemodialysis patient at DR. Pirngadi Medan Hospital were recruited as the participants. The number of the participants was then devided into 16 patients for control group and 48 patients for intervention group. The Intradialysis Exercises were given for eight weeks. The statistic methods used to analyzed the data was t-test and multiple regression. **Result:** The results of the study identified that the Intradialysis Excercise was influencing hemodialysis adequacy in decreasing body weight ($p=0,000$), and ureum level ($p=0,043$), but there was no significant effect on intra and post dialysis blood pressure and pulse ($p>0,05$). Intradialysis Exercise in accordance with age, gender, BMI, fluid intake were significantly interfere body weight ($p=0,002$), but not for the ureum level, intra and post dialysis blood pressure and pulse ($p>0,05$). **Discussion:** There was a significant effect of Intradialysis Exercise in increasing hemodialysis adequacy. This study recommended to introduce the Intradialysis Exercise as a method of an independent nursing intervention in hemodialysis unit through sosialition, training and a policy.

Key words : hemodialysis; hemodialysis adequacy; intradialysis exercise; chronic kidney disease

PRESURGICAL SKIN PREPARATION WITH CHLORHEXIDINE GLUCONAT 2% BATH-CLOTH NO-RINSE FOR AVOIDING SURGICAL SITE INFECTION (SSI) IN ORTHOPAEDIC SURGICAL PATIENTS

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ABSTRACT

Introduction: Surgical Site Infection (SSI) was common complication in orthopaedic surgical patients. Many studies show involvement of endogenous normal skin bacteria colonization that infects acute surgical wound (Eiselt, 2009). Chlorhexidine gluconate 2 % was a current material that was believed as a bacteriostatic and bactericide for reducing bacteria's colonization on skin that caused SSI (Edmiston, 2013). There is no standardization of time, how many times a day, how much it was needed, and standard operating procedure for using this material for reducing SSI on orthopaedic Surgical Patients. The purpose of this study was to find the effectivity of Chlorhexidine Gluconat 2% bath-cloth no-rinse for avoiding SSI in Orthopaedic Surgical Patients. **Method:** A Quasy experimental with post-test only non-equivalent control group design. The Total sample were 18 patients with remove implant procedur which divided into two groups : (1) non-intervention control group, (2) group with Chlorhexidine Gluconat 2% bath-cloth no-rinse. The data of Surgical site infection level were collected using a daily obvservational of infection CDC and were analyzed by using Mann Whitney U Test. **Result :** The result show there was no significant difference on level of surgical site infection between Non-intervention control group and group with Chlorhexidine Gluconat 2% bath-cloth no-rinse ($p = 0,16$). **Discussion :** There was no significant effect of Chlorhexidine Gluconat 2% bath-cloth no-rinse for avoiding Surgical Site Infection (SSI) in Orthopaedic Surgical for the next study must be do on longer time ad specific measurement with clinical laboratory data

Key words : Surgical Site Infection (SSI), chlorhexidine gluconate 2 %, surgical patients, orthopaedic

THE IMPACTS OF THE USE OF TRACTION IN FEMORAL FRACTURE PATIENTS

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ABSTRACT

Introduction This study aims to describe the impact of the use of traction on the incidence of pressure ulcer, pneumonia, constipation, anorexia, urine static, and static vein . **Method** This research design is descriptive with a sample size of 16 femoral fracture patients. Samples were obtained with a total sampling. The study was conducted in Malang Dr. Saiful Anwar Hospital during October in 2013. **Result** The results showed that the incidence of decubitus ulcers and anorexia each was 18.8 %, the incidence of constipation and static vein each was 25%, whereas pneumonia and static urine were not found. **Discussion** Monitoring and evaluation of the patients using the traction are needed so that the arisen problems can be prevented or treated immediately. The future studies will be expected to use larger sample sizes in order to ascertain whether the onset of the problems is caused by the use of traction.

Key words: *traction, femoral fracture*

INTRODUCTION

Traction is force applied by weights or other devices to treat bone or muscle disorders or injuries. The purpose is to treat fractures, dislocations, or muscle spasms in an effort to correct deformities and promote healing (Senagore, 2004). In general, traction is divided into skin and skeletal traction. Skin traction is the use of force directly to the skin through the use of splints. While in the skeletal traction, the force is done through a stainless steel nail inserted in the bone. Compared with skin bone, skeletal traction can be used in the long term (Black and Hawks, 2005).

Previous studies stated that the use of traction allegedly associated with the onset of problems associated with immobility. They include decubitus ulcers, pneumonia, constipation, loss of appetite, static urine, urinary tract infection, and venous static (Smeltzer, Bare, Hinkle, & Cheever, 2009). In general hospitals, the use of traction is often used as part of treatment, particularly femoral fractures. However, until now there had been no significant reports, related to the incidence of the problems that occur due to the use of traction. Therefore, it is necessary to study the impact of traction in patients with femoral fractures. The purpose of this study was to describe the incidence of health problems due to the use of traction in the long term on femoral fracture patients which include the

incidence of pressure sores, signs and symptoms of pneumonia, constipation, anorexia, urinary static, and static vein.

METHOD

This study was a descriptive with cross-sectional design. The population were patients with femoral fracture, mounted traction, inpatient at least 7 days, and willing to become respondents. Patients who experience loss of consciousness were excluded from the study sample. The sample sizes of 16 people were taken by total sampling.

The variable in this study is the impact of the use of traction. The impact of the use of traction is defined as the onset of health problems resulting from the use of traction, both skin and skeletal traction in patients with femoral fracture which include decubitus ulcers, signs and symptoms of pneumonia, anorexia, constipation, urinary static and static veins.

The research instrument used sheets of examination developed by the researcher. Data collection was done after approval by ethics committee of Health Polytechnic of Malang and receiving permission from Dr. Saiful Anwar Hospital of Malang. Before collecting data, the researcher provides information about the purpose and benefits of research to the respondents. If the respondent had an objection, the respondents were asked

to sign an informed consent. Data were collected through physical examination and then documented in the observation sheets.

After the data were collected, and then analyzed by univariate analysis. Univariate analysis was conducted to elucidate the impact of the use of traction in patients with femoral fracture in Dr. Saiful Anwar Hospital of Malang which includes the proportion of incidence of decubitus ulcers, pneumonia, constipation, anorexia, urinary static and static veins. Data were analyzed by computer using SPSS v.15.

The study was conducted in inpatient wards (IRNA II) Dr. Saiful Anwar Hospital of Malang which consists of 17th, 18th, 19th, 20th, and 21th ward, during the month of October 2013.

RESULTS

The study results were categorized into the general characteristics and the specific characteristics of the respondents. General characteristics of respondents consisted of age, gender, length and type of traction. Meanwhile, the specific characteristics include decubitus ulcers, pneumonia, constipation, anorexia urine static and static veins. The following will be presented the characteristics of respondents above.

The results of the analysis obtained the mean of respondents age was 40.44 years (95% CI: 28.11 to 52.76), with a standard deviation of 23.13 years. The youngest age was 23 years old and the oldest were 89 years of age. From the interval estimation can be concluded that the mean of respondent's age was believed between 28.11 up to 52.76 years.

The frequency distribution of respondents by sex was known that the majority of respondents were male in the amount of 13 patients (81.3%). While the remaining 3 patients (18.7%) were female. The frequency distribution of respondents by type of traction was known that the majority of traction that was used by the patients were skin traction at 14 patients (85.5%). While the use of skeletal traction only 2 patients (12.5%).

The results of the analysis obtained the mean of use of traction on the respondents is 12.31 days (95% CI: 9.61 to 15.01), with a standard deviation is 5.069 days. The use of the shortest is 7 days and the longest is 21 days. Based on the results of the estimation interval can be concluded that is believed the

mean of use of traction on the respondent is ranging between 9.61 up to 15.01 days.

Specific characteristics of the respondents consisted of decubitus ulcers, pneumonia, constipation, anorexia, urinary static and static veins. Based on Table 1, note that the health problems that arise in the respondents only four problems namely decubitus ulcers, anorexia respectively of 3 patients (18.8%), constipation and static vein respectively by 4 patients (25%). While pneumonia and static urine, were not shown to occur in respondents.

Table 1. Frequency Distribution of Specific Characteristics of Respondents, October 2013

Variables	f	%
Decubitus Ulcer		
• Exist	3	18,8
• Not Exist	13	81,2
Total	16	100,0
Pneumonia	0	0
• Exist	16	100
• Not Exist		
Total	16	100,0
Constipation		
• Not Exist	12	75
• Exist	4	25
Total	16	100,0
Anorexia		
• Not Exist	13	81,2
• Exist	3	18,8
Total	16	100,0
Urinary Static		
• Not Exist	16	100,0
• Exist	0	100,0
Total	16	100,0
Static Veins		
• Not Exist	12	75
• Exist	4	25
Total	16	100,0

DISCUSSION

Based on the results of the study, it was found that the mean of age of respondents is 40.44 years with the youngest age is 13 years old and the oldest is 89 years old. Viewed from the results in above, the incidence of femoral fracture at the age is little different from the the incidence of femoral fractures in general. Femoral fractures are common in older age, while the femoral shaft fracture is common in young adults. Femoral fractures in the elderly is often associated with osteoporosis and fall injuries, while in young adulthood femoral fracture is often associated with motor vehicle accidents or falls from

height (Smeltzer, Bare, Hinkle, & Cheever, 2009). The incidence of femoral fracture will increase with increasing age and the most frequently have femur fractures are those aged 80 years and older (Paspati, Galanos, & Lyritis, 1998). The cause of femoral fracture in patients hospitalized in inpatient ward Dr. Saiful Anwar Hospital was due to a traffic accident. That is why the age factor varied from a young to very old age due to a traffic accident regardless of age.

The incidence of femoral fracture in this study is more experienced by male that is 81.3%. Some earlier studies have claimed that there is an increase in femoral fracture each year in which the incidence of male more than female. Research conducted by Löfman, Berglund, Larsson, & Ross, (2002) stated that over the last 15 years from 1985 to 2000 there is an increase the number of femoral fracture each year both in men and women. In men increased by 39% while only 25% of women.

The majority of the type of traction used by respondents were skin traction as many as 85.5% while the skeletal traction just as many as 12.5%. Researcher did not find a reason for the use of skin traction is more commonly used in preoperative management of patients with femoral fracture than a skeletal traction. However several references stated that the skin traction is indicated mainly fracture in children and fracture or dislocations in adults who only need a moderate traction in a relatively short time. whereas, skeletal traction is useful for unstable fracture or fragmented fracture (fracture lines is than one) and on those in which experience misaligned of fracture lines because of the strong pull of the muscles around it, for example in a fracture femur (Byrne, 2009).

The mean of use of traction on the respondents is 12.31 days. The shorter one is 7 days and the longest one is 21days. There has been no time restriction on the use of traction. Traction is used temporarily until surgery is performed (Vanlaningham, Schaller, & Wise, 2009; Handoll, Queally, & Parker, 2011).

Based on Table 1, it is known that decubitus ulcer was found in 3 respondents (18.8%). The onset of decubitus ulcers in respondents strengthen the researcher presumption that the use of traction is a risk factor of decubitus ulcers. This is consistent with the opinion of Smeltzer, Bare, Hinkle, & Cheever (2009), which stated that decubitus

ulcers can occur because of immobility. According to the researcher opinion, traction may cause immobilization on the bed for a long time. immobilization in a long time will suppress certain areas on the patients body. Continuous pressure for a long time causes the blood vessels collapse, tissue hypoxia and cell death (Corwin, 2009). Finally ulcers occur on depressed area.

Based on table 1, none of the respondents who experienced pneumonia. It denied the possibility of the assumption that the use of traction can cause pneumonia. Theoretically pneumonia that occurs in patients who are installed a traction allegedly because of the influence of immobility, would reduce vital capacity and pulmonary tidal volume, increase the secretion and lower expectoration. The efforts to clean secretions that aren't optimal will cause the accumulation of secretion and increase the growth of bacteria on the area under the obstruction (Kauffman, Barr, & Moran, 2007). However, the results showed that no respondents who experienced pneumonia. This may be caused by several factors. According to Hadjiliadis (2013), the best prevention efforts to prevent the spread of germs is to wash the hands. In the post-surgical patients, prevention efforts can be conducting by a deep breathing, thus keeping the lung remain open. According to observations of the researcher, prevention efforts are most visible in preventing nosocomial infections in Dr. Saiful Anwar Hospital is the hospital's policy about hand washing for hospital personnel and visitors when entered the ward and interacted with patients. An antiseptic solution for hand hygiene provided from the entrance until in the ward of hospital.

Based on Table 1, it is known that constipation was found in 4 respondents (25%). These findings strengthen the hypothesis that the use a traction is a risk factor for the occurrence of constipation. Koutoukidis (2009) stated that the constipation associated with immobilization, resulting in decreased intestinal peristalsis. According to researcher, the use of traction leads to immobility on the bed provoking constipation.

Based on Table 1, it is known that anorexia was found in 3 respondents (18,8%). Like constipation, these findings strengthen the hypothesis that the use a traction is a risk factor for the occurrence of anorexia. Koutoukidis (2009), stated that anorexia also

associated with immobilization and decreased intestinal peristalsis. according to researcher, the use of traction lead to immobility on the bed as well causing anorexia.

Based on table 1, it can be seen that none of the respondents who experienced static urine. This eliminates the statement concerning the possibility of using traction can cause bladder problems. It was thought previously that the static urine occurs because the process of emptying the urine is not complete (Smeltzer, Bare, Hinkle, & Cheever, 2009), but the results showed that no respondents who complain urinary problems. So it was likely the process of emptying the urine can be done well.

Based on table 1, shows that Static veins found in 4 respondents (25%). The finding of static vein on the respondents corroborates the opinion that the use of traction is a risk factor of leg edema due to poor circulation in the veins. Smeltzer, Bare, Hinkle, & Cheever (2009), stated that static veins occur because of immobility. Most likely immobility due to the use of traction on the respondents resulted in venous blood flow in the legs becomes static.

CONCLUSION AND RECOMENDATION

Based on the results and discussion, it can be concluded that there were 4 health problems that appear on the respondents, whereas 2 problems don't appear. The health problems included the incidence of decubitus ulcers (18.8%), constipation (25%), anorexia (18.8%), and static vein (25%). Whereas 2 problems which weren't found include pneumonia and urinary static.

Based on the conclusion, the researcher recommend the importance to monitor and evaluate the patients with femoral fracture who use the traction for a prolonged period in order to prevent the emergence of health problems related to immobility.

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THE COMPARISON OF GERM NUMBER BETWEEN THE PATIENTS WASHED BY TRADITIONAL METHOD USING POVIDONE IODINE ANTISEPTICS AND ANOTHER METHOD USING DISPOSABLE BED BATHS IN ICU OF RSUD PROF.DR. MARGONO SOEKARJO PURWOKERTO

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ABSTRACT

Introduction: Taking a bath can eliminate the microorganism from the skin and the secretion, expel the body odor, improve the blood circulation on the skin, and make the body relaxed and fresh. This study was purposed to find out the comparison of microorganism number in the patients washed by traditional method using povidone iodine antiseptics and another method using a disposable bed baths.

Methods: The design of the study was pre experimental design with two group before and after design. The sample was 30 respondents, divided into two groups of 15 persons with a different treatment to each. The data analysis used independent sample t test. **Results:** The result of independent sample t test shows a p value of 0.876 which is more α 0.05 meaning there is no significant difference between the methods. The traditional method reduces the microbes of 1281 cfu/cm² and the method using disposable bed baths decreases the microbes of 1207.93 cfu/cm². **Discussion:** The traditional method can reduce more 73.07 cfu/cm² microbes that the new method.

Key words: povidone iodine antiseptics, disposable bed baths, number of microbes

EFFECTIVENESS EDUCATION EMPOWERMENT IN INCREASING SELF EFFICACY AMONG PATIENTS WITH CHRONIC DISEASE

A LITERATURE REVIEW

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ABSTRACT

Introduction: Non Communicable Disease (NCD) or a chronic disease that is not contagious to one of the health problems encountered in Indonesia. Indonesia reported that the number of deaths from NCDs have increased (Faulya, 2014). Patients with chronic diseases have complex problems of the physical condition, psychological, social, economic, and spiritual patient that may affect physical functioning, mental, and physical activity of the patient (Curtin, 2002, Farida, 2010, in Faulya, 2014). Therefore, treatment and care of patients with chronic illness is a long process in which the patient requires a strategy for managing the disease. One of the psychosocial factors to reducing chronic disease risk factors is self-efficacy. One of the nursing interventions to improve self efficacy in patients with chronic diseases is the empowerment Education. Nursing as a health professional in getting the appropriate outcome indicators to assess the empowerment of education as a nursing intervention is a challenge that must be faced. This review seeks to gather evidence through literature review about the effectiveness of empowerment education on self efficacy in patients with chronic diseases. Some evidence suggests that through the concept of empowerment, patients can improve self-efficacy, self-esteem, decision-making ability and responsibility to the health of patients with chronic diseases. To be able to understand evidence based (study of facts) in the form of literature review on the effectiveness of education empowerment towards self-efficacy in patients with chronic diseases. **Methods:** The source article is used obtained from Google Scholar search, among others, Medline, Ebscho, PubMed, SagePub, and Pro Quest, as well as unpublished research results derived from theses from 2004 up to 2013. Journal in a review based on studies in accordance with the inclusion criteria. Once obtained, then do vote articles up to the stage of making literature review. **Results:** This review resulted in the effectiveness of empowerment education on self-efficacy in patients with chronic diseases. **Discussion:** Empowerment education towards self efficacy effect on patients with chronic diseases of the condition of the disease.

Key words: *chronic disease, empowerment, self-efficacy*

INTRODUCTION

Background

Non Communicable Disease (NCD) or a chronic disease that is not contagious is one of the health problems encountered in Indonesia. Indonesia as a developing country reported that the number of deaths from NCDs have increased (Faulya, 2014). According to the Riset Kesehatan Dasar (Riskesdas) 2007, suggesting there has been a transition in which the proportion of infectious disease epidemiology decreased from 44.2% to 28.1% but the proportion of non-communicable diseases has increased sharply from 41.7% to 59, 5%. There are many chronic diseases including: heart disease, chronic renal failure, hemodialysis, and DM.

Patients with chronic diseases have complex problems of the physical condition, psychological, social, economic, and spiritual patient that may affect physical functioning, mental, and physical activity of the patient (Curtin, 2002, Farida, 2010, in Faulya, 2014). Therefore, treatment and care of patients with chronic illness is a long process in which the patient requires a strategy for managing the disease. Self-management as an active participation in the treatment and care of patients with chronic illnesses can be done through an adaptive coping behaviors, dietary compliance and the use of drugs. According to Lev and Owen (1998, in Ika Setyo, 2011) states that patients who have confidence in the ability to perform self-care would be more likely to actually perform the task. One of the

psychosocial factors that play a role in reducing chronic disease risk factors is self-efficacy.

Self-efficacy by Bandura (1977) is defined as a person's belief his ability to undertake planned behavior that can affect their lives. Self-efficacy influential in the life of a person's thinking, motivate yourself, and act (Zulkosky 2009 in Wantiyah, 2010). Self-efficacy refers to how much confidence one can take action to deal with certain situations (Bentsen, et al, 2010). Assessment of self-efficacy is a bridge between knowledge and self-care behaviors of real (Kara & Alberto 2006, in Ika Setyo, 2011). Bandura (1994) states that self-efficacy can be formed and evolved through four processes, namely cognitive, motivational, affective and selection process. The sources of self-efficacy can be derived from individual experience, the experience of others, social, and physical and emotional conditions. Nursing interventions to improve self-efficacy can be done through a source and a fourth process (Lee, Arthur, Avis, 2008; Wantiyah, 2010).

One of the nursing interventions to improve self efficacy in patients with chronic diseases is the provision of educational empowerment (Empowerment Education). Empowerment is the process of helping someone to create hope, trust, encouragement and gave a new direction in life (Mok, E., & Martinson, I. 2000).

Nursing as a health professional in getting the appropriate outcome indicators to assess the empowerment of education as a nursing intervention is a challenge that must be faced. This review attempts to gather evidence through Literature Review about the effectiveness of empowerment education on self efficacy in patients with chronic diseases. According to Mok and Martinson (2000), and Funnell & Anderson (2004), the issue of empowerment towards self-efficacy education relevant to patients with chronic diseases because of the ways in which patients present with loss of control and confidence in everyday life. Some evidence suggests that through the concept of empowerment, patients can improve self-efficacy, self-esteem, decision-making ability and responsibility to the health of patients with chronic diseases.

METHOD

The method used in the Literature review begins with the selection of a topic, then the specified keyword to search journals in English and Bahasa Indonesia through several databases, among others, Google Scholar, Medline, Ebscho, PubMed, and Pro Quest, as well as the results of research that is not published sourced of the thesis. This search is limited to journals from 2004 until 2013. Keyword English used is "Empowerment and Self Efficacy", "Empowerment and Chronic Disease", "Empowerment and Self Efficacy and Chronic Disease". Indonesian to using the keyword "chronic disease, empowerment, empowerment, and self-efficacy". Journal selected for review based on studies carried out in accordance with the inclusion criteria. Criteria for inclusion in this review is the use of literature Education Empowerment against self-efficacy in clients with chronic disease (such as chronic kidney disease, hemodialysis, and DM).

A review will consider randomized controlled trials (RCTs) that evaluated the effectiveness of interventions using the concept of empowerment for patients with chronic diseases. If there is a shortage of RCT, including other research methods, such as experimental quasy will be considered as criteria for inclusion. Search using keywords above are found 30 journals. From all journals obtained in accordance with the theme are 6 articles. Six articles are then in look and do Critical Appraisal.

RESULTS

The research reviewed in this article do not entirely using control group and the treatment of the respondents to assess the effectiveness of empowerment education on self efficacy in patients with chronic diseases. The sampling method used in most research conducted a randomized, ie a total of 3 studies, while the rest (2 studies) quasy experimental basis. A good research should take samples at random / random that research results can be generalized and suppress the occurrence of bias in the study (Notoatmojo, 2010). Interventions aimed at empowerment education given to overcome the psychosocial problems experienced by patients with chronic diseases. The control group in this review are not recommended to get empowerment education. Duration of research used in this

article varies, ranging from 4 weeks to 6 weeks. The longer term research used in this type of research, the better for that measured self-efficacy, which the desired change can not happen in a short time.

One of the results of research conducted in Randomized Control Trial is the research conducted by Tsay (2004). Tsay (2004) states that empowerment education showed a significant change in self-efficacy. The sample was 50 patients with HD were divided into the treatment group and the control group, in which the intervention carried out for 6 weeks with each session \pm 1hr. The results showed that the value of self-care self-efficacy ($F(1,47) = 10.82, p = 0.002$ in the empowerment group had significantly greater than the increase in the control group.

Similarly with the second study is a Randomized Control Trial study by Anderson RM, et al. (2009). Anderson RM, et al. (2009) which states that the Empowerment Perceived lead to increased understanding of diabetes (self-efficacy) $p = 0.001$ and satisfaction with diabetes treatment $p = 0.019$ compared to the control group. The study was conducted on a sample of 310 patients with type 2 diabetes mellitus with empowerment education is divided into five sessions with each session \pm 1hr then followed up via telephone for 1 month. The third study is a study by Moattari Randomized Control Trial (2012). Moattari (2012) states that There are significant differences in the effects of empowerment for self-efficacy between treatment groups with the control group. The study was conducted in 48 patients with HD with interventions that are divided into two sessions with the duration of each session educating \pm 1.5 hours for 6 weeks.

The fourth and fifth research is a quasi experimental study. The fourth study conducted by Royani (2013). Royani (2013) states that the empowerment scores ($P \leq 0.001$) and self-care self-efficacy ($P = 0.003$) in the empowerment group showed a significant increase is greater than the control group. The study was conducted on 80 samples randomly selected into empowerment group ($n = 40$) and control group ($n = 40$). The fifth study conducted by Nuari (2013). Nuari (2013) states that There were significant differences between the treatment groups with the control group after the intervention, an increase in self-empowerment and quality of life. This was

confirmed by Mok and Martinson (2000), and Funnell & Anderson (2004), the issue of empowerment towards self-efficacy education relevant to patients with chronic diseases because of the ways in which patients present with loss of control and confidence in everyday life. Some evidence suggests that through the concept of empowerment, patients can improve self-efficacy, self-esteem, decision-making ability and responsibility to the health of patients with chronic diseases.

The fifth study showed that education Empowerment effect on self-efficacy so that it can be applied. The strength of the study was the significant results between Empowerment is very applicable to self efficacy when used in patients with chronic diseases. However, it should be not only self efficacy used in assessing interventions empowerment, internal and external factors also influence a person in changing one's behavior. Based on this research, it was found that the internal factors of the individual self is very influential on self-efficacy is motivation and depression. Self efficacy is a form of health behavior. According to Bloom (in Notoatmodjo, 2005), the behavior of which is formed in a person affected by two main factors, namely external factors and internal factors. External factors are both physical environmental factors such as climate, weather and non-physical in the form of social, cultural, economic, political and so on. Meanwhile, internal factors of attention, observation, perception, motivation, imagination, suggestibility, depression and so forth that respond to external stimuli. If an individual is interested or motivated to respond to stimuli from the external environment such as social support, family, and the environment it will be difficult to change behavior in a positive direction, for example in individuals who experience depression that is difficult to accept stimulus from outside himself.

DISCUSSION

Implications for Practice

Self-efficacy as predictors of health behavior is required in patients with chronic diseases to be able to independently manage the disease through lifestyle changes and treatment of risk factors. Research that has been explored in this article shows that empowerment education can improve self efficacy in patients with chronic diseases. Although not all studies directly measuring the

prevalence of self-efficacy, but this conclusion can be drawn based on the parameters measured by indicators of self-efficacy. It can be used as input for bedal medical nurses in providing nursing care to patients with chronic diseases and are able to apply a comprehensive nursing asuha beginning of assessment and evaluation. Empowerment education can be implemented on a rehabilitation program, nurses can provide information and education to patients with chronic diseases. On the implementation of home visit and nurse clinical check-ups should evaluate the patient's behavior in managing his illness themselves and ask if there is a problem, if found problems then need to be modified.

The results of this review will add to our knowledge of the importance of providing service to the concept of empowerment (empowerment) in patients with chronic diseases in order to improve patient control his illness. Therefore, treatment and care of patients with chronic illness is a long process in which the patient requires a strategy for managing the disease. Empowerment education can be applied in nursing care in order to provide a better quality of life for people with chronic disease.

CONCLUSION AND RECOMMENDATION

Conclusion

After conducting a review, the conclusions that can be delivered as follows, are:

Patients with chronic diseases have complex problems of the physical condition, psychological, social, economic, and spiritual patient that may affect physical functioning, mental, and physical activity of the patient. Therefore, treatment and care of patients with chronic illness is a long process in which the patient requires a strategy for managing the disease.

Self-management is seen in the psychosocial aspects as active participation in the treatment and care of patients with chronic disease plays an important role in reducing chronic disease risk factors is self-efficacy.

One of the nursing interventions to improve self efficacy in patients with chronic diseases is the provision of educational empowerment (Empowerment Education). Empowerment is the process of helping someone to create hope, trust, encouragement

and gave a new direction in life (Mok, E., & Martinson, I. 2000).

Education empowerment interventions can improve self-efficacy, self-esteem, decision-making ability and responsibility to the health of patients with chronic diseases.

Recommendation

Need for training for nurses in the clinic and in the community to take control of empowerment education in applying nursing care for patients with chronic diseases.

Further studies should be done in Indonesia, for example, further explore the variables associated with self-efficacy education empowerment, and psychosocial and quality of life in patients with chronic diseases, such as leprosy and TB in patients with pulmonary experiencing psychosocial problems.

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THE EFFECTIVENESS OF ORAL HYGIENE BY USING A ANTISEPTIC ORAL HYGIENE ON THE PREVENTION OF VENTILATOR ASSOCIATED PNEUMONIA (VAP) IN PATIENTS INSTALLED MECHANICAL VENTILATOR: A LITERATURE REVIEW

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ABSTRACT

Introduction: VAP is life-threatening complications for each patient treated in the ICU, especially those using tracheal tube and/or ventilator. The purpose of this literature review is to determine the effect of VAP Bundle (oral hygiene) in the prevention of VAP in patients with mechanical ventilation.

Method: The search strategy in English and Indonesian studies relevant to the topic predetermined, performed by accessing the database, ProQuest Research Library and Google scholar with the keywords of VAP Bundle, Oral Hygiene, accured Ventilator Pneumonia. **Result:** After a simple analysis of the titles and abstracts of only five articles that fit inclusion criteria. VAP Bundle Care particular oral hygiene continue improving through the latest facts regarding appropriate interventions in preventing VAP. Various nursing interventions can be done in particular to prevent the occurrence of VAP, and based on an article that explored that with antiseptic oral hygiene is the most effective intervention for the prevention of VAP. **Discussion:** This research is expected to increase awareness of nurses as care providers in preventing the occurrence of VAP in patients on mechanical ventilation.

Key words: Ventilator Acquired Pneumonia (VAP), VAP bundle, oral hygiene, patient on mechanical ventilation

INTRODUCTION

One of infectious disease that occurs as a complication of installation of tracheal and/or ventilator on hospitals admission is pneumonia or called with Hospital Acquired Pneumonia (HAP). HAP is happened in the intensive care unit primarily associated with the installation of ventilator known as ventilator-associated pneumonia (VAP). VAP is life-threatening complications for each patient treated in the ICU, especially those using tracheal tube and/or ventilator. VAP is responsible for 90% of the incidence of infection in hospitals and occur within 48-72 hours after intubation and therefore contributes on the increased use of the ventilator and length of hospitalization (O'Keefe-McCarthy, et al, .2008). VAP affects the continuity of patient care in the ICU. The onset of complications, morbidity and mortality rates are higher, as well as an increase in the cost of care, especially in critically ill patients who mounted ventilator (Muscedere et al, 2008; Vincent, et al., 2010).

In critically ill patients, generally VAP is caused by microorganisms from the nasal aspiration, oropharyngeal or gastric invade the lower respiratory tract, facilitated by a decrease in the immune system (Torres et al, 1992 in Keeley, 2007). VAP can occur in patients with poor oral health and oral care less (Grap & Munro, 1997). Some things are also a risk factor for the incidence of VAP is the resting position early and severity of disease (Tolentino-Delos Reyes, et al, 2007).

In the United States, VAP is the second leading cause of HAI and 25 % of the incidence of infection in the ICU (Sedwick , et al. , 2012), while in Europe VAP is the most common nosocomial infection second to urinary tract infection (Koeman & Joore, 2006). In Indonesia there are no exact data on the incidence of VAP (Widyaningsih, & Buntaran, 2012). However refer on the data from abroad this condition should come into attention of all parties including the nurse. Many things can be done to prevent the

occurrence of VAP, like a lot of research has also been conducted, one of the results of research is the VAP Bundle, a nurse should know the intervention that has been set on the VAP Bundle to prevent VAP .

Based on CPIS (2012), the component Bundle VAP are: Elevate head 45° when possible, if not, consider to maintain the position of the head of more than 30°, Evaluation daily on the readiness of extubation , use of endotracheal tube with drainage secretion subglottic, Oral care and decontamination with chlorhexidine , a safe enteral nutrition early in 24-48 hours after ICU admission. One Bundle development of VAP is oral hygiene measures are effective in patients using mechanical ventilator, a cost efficient manner to reduce morbidity and mortality in patients with VAP. This literature review was aimed to understand the evidence based and literature review on the effect of VAP Bundle (oral hygiene) on the prevention of VAP (ventilator-associated pneumonia) in patients with mechanical ventilator.

METHOD

The literature searches strategy on this report to be comprehensive in the medical literature and nursing, especially literature on respiratory, critical medical and critical nursing. Conducted a literature searches to find information in accordance with the question and the purpose of writing. The data source searches are conducted through computer databases via ProQuest Research Library and Google scholar. The literature used was genuine and Dissertation research articles published between the years 2006-2012. Research article or literature in use are in Indonesian language and English.

Keywords used are VAP Bundle, Oral Hygiene, Ventilator Acquired Pneumonia. ProQuest search results on 25 journals, while Google scholar 20 journals. The number of journal on the search for the topic of oral hygiene for prevention of VAP has been done. Based on previous researches, a wide range of materials for oral hygiene recommendations. Full text articles and abstracts are reviewed, to choose studies that fit the criteria of researchers. Inclusion criteria for this study were: journal that study on the effect of oral hygiene in the prevention of VAP in patients on mechanical ventilation, the design of the research is a Quasi-Experimental. Simple

analysis carried out on the title and abstracts of five articles that fit inclusion criteria. The method used in all the articles of this journal is quantitative method with a quasi-experimental design (quasy-experiment) which this draft seeks to reveal causal relationships by engaging with the control group and the experimental group in addition to the method appropriate to answer the research objectives. Articles will be reviewed as further samples are presented in Table 1.

RESULT

There are 5 research articles reviewed all using quantitative designs with Quasi-Experimental methods which study on oral hygiene as one Bundle VAP applications on patients using mechanical ventilation in the ICU. The results are recorded based on the data obtained by using statistical tests. Assessment indicators used CPIS scores. Diagnostic Criteria for VAP by CPIS (2012) are as follows: Radiographic abnormalitas, opacs their views on chest radiographs new or progressive and persistent, compatible with pneumonia, such as: infiltrate, consolidation or cavitation, WBC $\geq 12,000$ or <4000 , Body temperature $> 38^{\circ} C$ with no other cause, and at least 2 of the following signs secretion tracheal: onset purulent new, or change the characteristics, or increasing amount of secretion, increased need for orosuction, respiratory krakles on inspiration or wheezing bronchial auscultation, and worsening gas exchange (eg, desaturation O₂, PaO₂ / FiO₂ <240 , an increased need for oxygenation or ventilation)

VAP Bundle is designed for a multidisciplinary professionals care team and provides ways of preventing the occurrence of VAP. Our review showed that VAP Bundle has goals and objectives that can show how interventions for the prevention of VAP. The indicators use to assess the presence of VAP is CPIS scores. In these articles we reviewed, there are other indicators that are used to determine an incidence of VAP.

1. Dissertation Alice Peggy Mulligan McCartt (2010) in his study to assess the presence of VAP by inspecting oral cavity acidity (pH), oral cavity bacteria culture results and using CPIS scores.

Research results: mouth pH in all three groups there was no significant difference, the culture of the oral cavity was

statistically significantly reduced in all three groups. The use of a 0.12% chlorhexidine spray and fabrics standard no significant difference between the 2 groups (group 1 and group 3), while the use of a 0.12% chlorhexidine and toothbrush in group 2 showed significant results in the first 72 hours. So the conclusion of this article that a 0.12% chlorhexidine and toothbrushes are more effective in the prevention of VAP. Based on the results of this research can be applied in order clinic.

2. Berry, AM (2013), in his research, to determine the presence of dental plaque microbiological samples were taken with swabs on the surface of the teeth above and below as well as on the patient's gum. This was done on day 1 and day 4 since the study began. Semi-Quantitative Analysis grouped positive if the colonization of the mouth as $> 10^5$ cfu / ml. While to determine the incidence of VAP by thorax images every day in accordance with the protocol in patients with mechanical ventilation., Otherwise occur VAP if the results radiologinya (X-Ray No infiltrate accompanied by two of the signs such as: (a) Temperature $> 38.5^\circ$ and temperature $< 35.0^\circ$ c, (b) white blood cells $> 11,000 / \text{mm}^3$ or $< 4000 / \text{mm}^3$, (c) there is a change of the characteristics of a secret becomes muco-purulent or purulent, (d) an increase in the need for oxygen fraction or the use of PEEP over 20%. in this study vaguer instrument used. Here mentioned no significant difference between groups in the intervention Listerine® or sodium bicarbonate and the control group. among these three groups was no more effective, but in this study it is strongly recommended for the use of sodium bicarbonate, because the result is the closest kind. the results of this study can be applied in order lacking clinic sodium bicarbonate considering the price is quite expensive.
3. Yusnita Deborah, et al (2012) observed Each group by taking secretions from the trachea before and after treatment, for later examination count the number and type of bacteria. Their findings indicate that the use of closed suction system in patients with mechanical ventilation reduce the amount of bacteria significantly post-intervention, so with an open suction system. Closed

suction system does better in reducing the number of bacteria in this study. Although VAP marked presence of bacteria in secret, but this research has not been able to demonstrate the occurrence of VAP certainty because there is no definite sign, so less can be applied in order clinic.

4. Yanti, Erwin (2010) observed using the observation sheet VAP characteristics with clinical data that fever $> 38.0^\circ\text{C}$ ($> 100.40^\circ\text{F}$) are not caused by other disorders, increasing the number of leukocytes above the upper limit of normal value (value leukocytes $> 10,000 / \text{mL}$) and the presence of purulent sputum. The findings were no significant differences result indicator value oral hygiene among the clients who make use of chlorhexidine without using chlorhexidine in prevention of VAP, so that the use of chlorhexidine as an oral hygiene may be more effective than without using chlorhexidine. In this study yet using gold standard VAP determination according to the CDC.
5. H. Mori, H. Hirasawa, S. Oda H. Shiga, et al (2006). In this study, the incidence of VAP rated based on time, duration of ventilator use, length of ICU and cause bacteria to keep doing interventions for the prevention of VAP as $30-45^\circ$ sleeping positions, the use of subglottic suctioning, the use of close suction and delivery of H2 blockers. The findings in this study is the incidence of VAP in oral care group were significantly lower than the group that did not receive oral care. In the conclusion, oral care can decrease the incidence of VAP in patients in the ICU. This study did not mention the type of materials used so that oral care can not be applied in order clinic. 5th article of this study conducted in Indonesia, Northeast Florida, Japan, with a population total of 2315 participants. Some of the shortcomings that have been reviewed in the article is on research Yusnita Deborah, here simply do not vote until the number of bacteria VAP, although one sign of VAP bacteria by the secret examination. Similarly, in research daughter Jackie (2010) to determine the existence of a VAP researchers did not use a standard instrument, just judging from the culture and the patient's clinical signs early and therefore can be said to be less valid

results. Results would be valid if it is done according to the standard measurement CPis as envisaged by the CDC. In research H. Mori et al, here did not mention the type of material used oral care, so it is not known whether research using only plain water. From the 5th of this article, the research of Alice Peggy Mulligan McCartt (2010) in accordance with the standards and can be applied in order clinic

DISCUSSION

Implications for Nursing Practice

The research reviewed in this article shows that the application of VAP Bundle particularly oral hygiene is very effective for preventing the occurrence of VAP. Oral hygiene is done there are a variety of ways, some use antiseptic, or just ordinary liquids. It can be done with suction or toothbrush. Results of the study were obtained from the 5th article studied that oral hygiene is very influential in the prevention of VAP. The use of antiseptic provide more effective results than without antiseptic.

In the VAP Bundle is designed to be used by a multidisciplinary team of professionals and all client care on a ventilator. VAP Bundle has been widely applied in the ICU, but note that this article is based on oral hygiene with antiseptic really play a role in the prevention of VAP. It can be used as input for ICU nurses, especially nurses for nurses is one of the medical team involved in the provision of nursing care in patients with ventilator. So the results of this study can be applied in hospitals, especially care at the ICU in patients using mechanical ventilation.

CONCLUSION

VAP Bundle oral hygiene care in particular continue to experience improvement through the latest facts regarding appropriate interventions in preventing VAP. Various nursing interventions can be done in particular to prevent the occurrence of VAP, and based on an article that explored that with antiseptic oral hygiene is the most effective intervention for the prevention of VAP.

There are some suggestion include:

1. The nurse's role is indispensable in the oral hygiene to help prevent VAP
2. Keep dillakukan research with a similar theme with different materials used for oral hygiene.

3. Need to do research on all VAP Bundle so it can be a major factor for the prevention of VAP
4. Need for teamwork in the prevention of VAP.

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RELATIONSHIP KNOWLEDGE AND ATTITUDE OF NURSE WITH TECHNICAL ABILITY IN THE IMPLEMENTATION OF ORAL HYGIENE IN STROKE PATIENTS

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ABSTRACT

Background : Oral hygiene is activity to clear the mouth, teeth and gums. Inability to care for stroke patients and there isn't cure mouthwash, ointment, paste can replace effort to systematically clean the oral cavity. if there isn't oral hygiene can lead to mouth odor and can also occur oral infections. Therefore, it is necessary technical ability of nurses in the implementation of stroke patients oral hygiene. **Methods** : This study used a correlational design with cross-sectional approach. Sample of 12 respondents with total sampling techniques. There was two variables that independent variables is knowledge and attitudes, dependent variables is technical ability of nurse. The statistical tests is rank correlation (rho) with significance level $\alpha < 0.05$. **Results** : There was relationship between of knowledge with technical ability nurse of oral hygiene ($\rho = 0.001$), the attitude of nurses in the implementation oral hygiene associated with technical ability nurse ($\rho = 0.002$). **Discussion** : Knowledge and attitudes of nurses related to technical ability nurse of oral hygiene in patients with stroke. For further study is required number of samples that more and better measurements to obtain accurate results.

Key words: attitude, knowledge, oral hygiene, technical ability

INTRODUCTION

Stroke or circulatory disorders of the brain is a neurogenic disease that causes brain dysfunction either focal or global (Saiful Islam, 2000) and the leading cause of disability the most (Lumban tobing, 1994). According to the results of Household Health Survey, there is increased stroke sufferers of 0.72 per 100 patients in 1984 to 0.89 per 100 patients in 1986 (Harjono, 2002). Sufferers may experience various problems such as impaired consciousness, impaired physical mobility, swallowing disorders and impaired self-care (Doengoes, 2000).

Problems swallowing food through the mouth can be a cause of inflammation of the mouth mucous membranes (Stevens, 1999) . Patients with impaired swallowing food given through a tube, so that saliva rarely experiencing changes that facilitate the formation of colonies of oral micro flora komensial, if the situation is allowed can lead to infections of the oral cavity (Tasota. 1998).

According to Wikipedia (2010), several clinical studies recent research has shown a correlation between poor oral hygiene (bacteria and infection of the oral cavity) and systemic diseases are cardiovascular disease (heart

attack and stroke), bacterial pneumonia, infants born low birth weight, complications of diabetes.

Oral hygiene is one of the necessary actions to keep the mouth avoid infection, cleanse and refresh the mouth (Clark, 2003). Also based on the personal experience of many people, according to (Wolf, 2006), there is no cure dessert, breath fresheners, ointment or a paste that can replace the effort to cleanse the oral cavity thoroughly and systematically. In such patients also accompanied by neurological deficits from mild to severe, including disorders of self care (Activity Daily Living).

Patients who experience loss of consciousness and neuromuscular disorders (Doengoes, 2000) Oral hygiene is an absolute act performed by nurses (Wolf, 2002). In hospitals Jombang this action is not performed optimally, it is proved from preliminary study conducted at room Flamboyan Regional General Hospital Jombang on August 23, 2014 the result form 13 patients interview, in the fact oral hygiene only doing by nurse in the morning. the technical capabilities of nurses as caregivers and educators have not been implemented to the maximum.

METHOD

The research design used "Cross sectional. The population in this study are all nurses in the Pavilion Flamboyan Hospital Jombang is 12 people. The sampling technique used total sampling technique. To determine the relationship between variables used Spearman Rho test with a significance value of $p > 0.05$.

RESULT

Implementation of the knowledge of nurses in Oral hygiene in Stroke Patients

The results showed most knowledge of nurses are in the good category 92% or 11 respondents, then nurses with less knowledge 8% or one respondent, and there isn't enough category.

Knowledge according Poerwodarminto (1985), is everything what known regard to something, in this case with respect to the nurse's knowledge in the implementation of oral hygiene in stroke patients. Most nurses are knowledgeable good oral hygiene because it is a simple act and uncomplicated.

Besides influenced by knowledge, the education level of respondents is the most dominant D III Nursing (92% or 11 respondents), while the level of education S1 Nursing (8% or 1 respondent). This is in accordance with the opinion of Mautra (1994) that the higher level of education a person more easy to receive the information.

The attitude of nurses in the Implementation of oral hygiene in Stroke Patients

The results showed that most of the attitude of nurses is a good category 58% or 7 respondents, then nurses with quite attitude 42% or 5 respondents, while having less attitude none (0%).

Good attitude of the respondents is a readiness to implementation of oral hygiene in the pavilion Flamboyan Hospital Jombang. This is in accordance with the opinion of Notoatmodjo (1993) regarding the attitude domain:

1. Receiving, that the nurses want to pay attention to the stimulus provided on the implementation of oral hygiene
2. Responding, which gives answers to both the questions about oral hygiene implement.

3. Respect, that is teaching others in this case the patient and family to participate in the implementation of oral hygiene in patients with stroke.

4. Responsible, is felt that nurses need to being responsible for the patient's oral hygiene through an act of oral hygiene.

Opinion in accordance with the attitude of nurses in hospitals Jombang because most nurses Favorabel attitude towards oral hygiene, it can be influenced by the mindset of nurses in receiving information about oral hygiene. Favorabel attitude is part of the nurse's readiness to react to the implementation of oral hygiene.

Nurses technical capabilities in the implementation of oral hygiene in Patients with Stroke.

The results showed that the majority of nurses have good technical skills 92% or 11 respondents, while 8% or 1 respondents have a moderate technical ability on the implementation of oral hygiene. It is due to the policy governing the implementation of oral hygiene, oral hygiene has become a culture and motivation to do because it is considered one of beneficial action in oral hygiene in patients with stroke. Gaffar (1995) explains that the main technical skills of nurses is to provide nursing services to individuals, families, groups or communities according diagnose problems that occur from a problem that is simple to complex.

This illustrates better knowledge of nurses then will increase technical skills of nurses in performing their duties and functions, and in accordance with that put forward by koizer (1991) that in carrying out its duties and functions, nurses need to equip themselves with the knowledge, attitudes, and behavior.

Relationship of Knowledge and technical ability in the implementation Oral hygiene in Stroke Patients

Spearman rho test results shows the significance (p) = 0.002 and a correlation coefficient of 0.365 means that there is a significant relationship between knowledge and technical skills of nurses in the implementation of oral hygiene in stroke patients. Besides, it is also seen from the level of knowledge is in good categories. Someone who is able to adopt a new behavior also expected to formulate such behavior in carrying out the tasks.

This study indicate that the level of knowledge respondent was quite good, and it can the do appropriate of technical ability, it is according to some respondents for oral hygiene procedures have been done and the previously existing procedures and equipment. Nursing also helps individuals undergoing therapy that is programmed and become independent of aid as soon as possible (Hunderson, 1960).

The most dominant relationship is a good level of knowledge with technical expertise at 83.3% or 10 respondents, and the level of less knowledge with good technical skills at one respondent (8.3%). The higher the nurse's knowledge of technical ability the better.

The relationship between attitude and technical ability in the Implementation Nurses Oral hygiene in Stroke Patients

Spearman rho test results in this study, significance of $P = 0.001$ and a correlation coefficient of 0.508 means there is a relationship between attitude and technical skills of nurses in the implementation of oral hygiene in patients with stroke. The results showed the majority of nurses attitude is good to respond to oral hygiene in stroke patients and most of the capabilities of technical accordingly.

From the research results were good attitude of the respondents, followed by the appropriate technical capabilities. This is because oral hygiene has been implemented optimally, so the actions already implemented oral hygiene well.

Respondents showed good attitude, this means in accordance with the opinion of Gerungan (1981), that attitude is always with respect to certain objects which may be the attitude of opinion or feeling, and it predisposes the person to act or act in accordance with its attitude toward an object. Besides, it needs to be supported with a strong motivation to change.

To make the changes effective by Roger (1962) quoted from Nursalam (2002) depending on the individuals involved and interested in developing or obtaining sought to advance and have a commitment to work and carry out. Meanwhile, according to Nursalam (2002) key to a successful strategy for change:

1. Start with yourself

Some members of the profession, nurses will never change or improve in achieving a goal that nurses had to start from yourself.

2. Start from small things

Oral hygiene is a simple action that failing to do so will reduce the quality of nursing care.

3. From now on, do not be waiting

Good attitude of the respondent can be a good opportunity to start doing the implementation of oral hygiene in patients with stroke in the pavilion Flamboyan Hospital Jombang.

A nurse will be able to run the capability of technical best when supported with a good attitude as well, but in this case not all the attitude of nurses either due to the perspective and experience of the work of each nurse is different, so it will greatly affect the response in conducting technical capabilities and function as service providers, although not all respondents have a good attitude in the running of technical ability but with the strict rules of the institution will maximize each - each nurse to be able to behave well towards each technical capabilities are implemented.

Relationship between attitudes enough with good technical ability which has a frequency of 41.7% (5 respondents) and for a good attitude with technical ability is 8.3% (1 respondent) while a good attitude to have a good technical ability has a frequency of 50% (6 respondents).

CONCLUSION

1. Knowledge of nurses in the implementation of oral hygiene in patients with stroke in the pavilion Flamboyan Hospital Jombang, the results showed the majority of respondents have good knowledge.

2. The attitude of nurses in the implementation of oral hygiene in patients with stroke in the pavilion Flamboyan Hospital Jombang, the results showed that most of the respondents have a good attitude.

3. Technical Ability of nurses in the implementation of oral hygiene in patients with stroke in the pavilion Flamboyan Hospital Jombang, the results showed that most of the respondents have good technical ability.

4. The results showed a correlation between knowledge with Technical Ability of nurses in the implementation of oral hygiene in patients with stroke in the pavilion Flamboyan Hospital Jombang, it influenced the development of education and continuous training conducted.
5. The results showed a correlation between the attitude of nurses and nurse's technical capabilities in the implementation of oral hygiene in patients with stroke in the pavilion Flamboyan Hospital Jombang. It is influenced by their commitment to work and carrying out of technical ability as a nurse.

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PROMOTING SELF CARE BEHAVIOUR IN DIABETES TYPE 2 BASED ON LEVINE'S CONSERVATION MODEL

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ABSTRACT

Introduction: Diabetes type 2 is chronic disease which is needed long term treatment, so the patient need self management education to prevent the complications. Self management will be effective if patients have knowledge, skills and self care behaviour. One of the nursing model theory is Myra E. Levine conservation model. This model is oriented towards energy conservation, structural integrity, personal integrity and social integrity. The objectives of the research are the influence of health education based on levine's conservation to self care behaviour in diabetes type 2. **Method:** This research is quasi experiment research with non randomized control group pretest posttest design. The treatment group given treatment, and the control group don't give treatment. **Results:** The result of the research indicates that there are significant difference of self care behaviour between treatment group and control group that effect of applying health education based on levine's conservation. Result of t test independent test at the self care behavior t value 25,790 ($p = 0.000$). **Discussion:** The conclusion is the application of health education based on levine's conservation has significant impact in improving the self care behaviour of patients with type 2 diabetes, because Levine Conservation affect the way people think (cognitive), feeling (affective), motivational, and selection of the behavior of the selected treatment by individuals.

Key words: *levine's conservation, self care behaviour, dm type 2*

INTRODUCTION

Diabetes Mellitus (DM) is a group of metabolic illness which categorized as the higher level of glucose in blood (hyperglycemia) because of the secretion disorder of insulin, insulin process disorder, or the combination of both (ADA, 2010). The result from many epidemiology researches showed the tendency of increasing incident and DM's prevalence type 2 in all over the worlds.

National prevalence of Diabetes Mellitus is 1,1%. East java is included to the highest prevalence of DM above the national prevalence. It also shows the tendency of be 10th grades of illness with the most visitation frequency of sentinel health care center in east java at the period of 2010 – 2012. Jombang is one of the regency in east java which suffered the 15th grades of Diabetes Mellitus with the most cases especially in 2013 and 2014 for about 16.380 cases (public health Office Jombang, 2014). The health care center in Perak Jombang has many sufferer Diabetes which called paguyuban diabetes (*Diabetes association*)". The total cases of Diabetes Mellitus in Perak's health care service in 2014

are 559 cases (health department of Jombang, 2015).

The diabetes association was held on august 26th 2015. The historical of it was held because there are many sufferers Diabetes Mellitus who have the worst blood sugar control, up to 200 mg/dl for the blood sugar indicators time. The education of patient and his/ her family is aimed to give more understanding about the historical of DM, prevention, information, and the implementation of DM, will be helpful to increase the contribution of family in the process of better result management. The existence of sufferer Diabetes like PERKENI, PERSADIA, PEDI and others are become very important, because this association support the knowledge of DM about its and increased their active role in the treatment modification (PERKENI, 2011).

One of the nursing models that already improved in the nursing assistance is a conservation model which is improved by Mira E. Levine. It is oriented to energy conservation, structural integrity, personal integrity, and social integrity, which is focused

on ability improvement of client to adapt increase the ability of the client to be able to adapt as much as possible to achieve optimal quality of life, Conservation model approach which is pioneered by Myra Estrin Levine appropriate to improve Self Care Behavior patients, thus optimal diabetes management.

The main concept of the model consists of wholism Levine (overall/integration), adaptation and conservation. Healthy wholism (overall) is something which is organic, change / progress, mutual benefit between the different functions and parts in the body, open and interact each other with the surrounding environment. Conservation model allows the nurse can help the individual achieve his integrity. This model provides guidance on how the relationship between the nurse - client by focusing on the influence and promote the integrity of the client's response to the client through the principle of conservation. Interventions to maintain the integrity of the network, energy conservation, personal integrity and psychosocial.

METHOD

This research is a quasi experimental research design Nonequivalent Control Group Design or Non-Randomized Control Group Pretest-Posttest Design, ie quasi experiment by dividing the existing group and the control group without differentiating significantly while still referring to existing natural form (Notoatmodjo, 2012).

The population in this study were all patients with type 2 diabetes who registered as members of the association of diabetes in Perak healthy care center's Jombang as many as 38. Based on the formula, the samples are the analytical numeric paired of samples obtained 16 respondents for each group.

The variables in this study consisted of two variables, namely the independent variable (free) and the dependent variable (dependent). The independent variable in this study is a Levine Conservation's model application. And the dependent variable is Self Care Behavior. This research instrument is SDSCA (Summary of Diabetes Self Care Activities). The study was conducted in two stages, by allocating the sample into two groups (treatment group and the control group). Furthermore, researchers carry out pre-test Self Care Behavior in the treatment group and the control group.

Then, Researchers used posttest in the treatment group and the control group. Then, the data is collected used analyzed and processed. Activity in processing the data include: checking the data (editing), coding (coding), and collating data (tabulating).

RESULTS

Based on Table 1 it can be seen that the Self Care Behavior of respondents in the experimental group before the intervention, the vast majority are in the medium category, are 9 respondents (56.3). After the implementation of the intervention, the Self Care Behavior respondents increased, the majority of respondents, 8 (50%) had levels of Self Care Behavior in the high category.

Table 1 : Self Care Behavior of respondents in the experimental group

No	Self Care Behaviour Level	treatment			
		Pre test		Post test	
		Σ	%	Σ	%
1	Very Low	-	-	-	-
2	Low	5	31,2	-	-
3	Moderate	9	56,3	6	37,5
3	High	2	12,5	8	50
4	Very high	-	-	2	12,5
Total		16	100	16	100

In table 2, the Self Care Behavior of respondents is the control group. Most of the pre-test during in a category is moderate those are 9 respondents (56.3%). Meanwhile, when the post-test, the majority of the Self Care Behavior respondents were in high category as many as 15 respondents (93,8 %).

Table 2 : Self Care Behaviour level to the control group

No	Self Care Behaviour	Kontrol			
		Pre Test		Post test	
		Σ	%	Σ	%
1	Very low	-	-	-	-
2	Low	4	25	-	-
3	Moderate	9	56,3	15	93,8
3	High	3	18,8	1	6,2
4	Very high	-	-	-	-
Total		16	100	16	100

In Table 3 it can be seen that the increase of Self Care Behavior which is occurred in the treatment group was higher than in the control group, the increase in the average value of Self Care Behavior in the

treatment group was 19 compared to the control group which only amounted to 0.15.

Table 3. The difference of Self Care Behaviour to the experimental group and control group.

No	Variable	Mean		Mean Difference
		Early	End	
1	Self Care Behaviour to the experimental group	106	125	19
2	Self Care Behaviour to the control group	106,7	106,9	0,15

Based on table 4, obtained the results of paired t test in the differences treatment of group before intervention Self Care Behavior with after the intervention. The test results paired t test in the control group found no difference Self Care Behavior in pre test and post test. Where negative values in the t test showed that the pre-test value is lower than the value of post test.

Tabel 4 Result test of Paired t Test Self Care Behaviour to the experimental group and control group

No	groups	Self efficacy	t	p
1	Experimental	Pre test	-	0,000
		Post test	8,061	
2	Control	Pre test	-	0,960
		Post test	0,051	

While based on table 5 it can be seen results of t test independent of the variable Self Care Behavior between treatment and control groups Self Care Behavior. There were differences significant between the treatment group and the control group. A positive value indicates that the value of the t Self Care Behavior treatment group is higher than in the control group.

Table 5 The result t Test Independent Self Care Behaviour to the treatment group and control group

No	Variabel	t	p	df
1	Self Care Behaviour treatment group	25,055	0,000	30
2	Self Care Behaviour control group			

DISCUSSION

The results showed that the Self Care Behavior in the treatment group experienced an increase after the intervention (Conservation

Levine). Levine Conservation Model focuses on the individual as holistic beings that interact with the environment. The results also show that there are different levels of Self Care Behavior in both groups during the pre-test that is lower in the treatment group than in the control group. It is related to the difference predisposing factors which is owned by the two groups, namely the difference duration of illness and income levels in both groups, the average length of hospital in the control group longer and the average income is greater than in the treatment group. This difference makes the Self Care Behavior differences between the two groups during the pre-test.

In addition a higher income level also contributed to the Self Care Behavior because they would have the economic resources to gain access the health services. On the other hand, the treatment group, the number of male respondents less than in the control group, so it affects the Self Care Behavior differences in both groups. This is according to research from Mystakidou (2010) men have Self Care Behavior higher than in women.

Improved Self Care Behavior that occurs in the control group, although it is lower than in the treatment group due to the control group also received health education in health centers. Therefore, it will contribute the Behavior of patients in the control group. Because according to the research results Falvo in Atak (2010) which states that health education can increase a person's Self Care Behavior.

During the activities of Diabetes patients association in the treatment group receive health education in a more structured, is the implementation of Conservation Levine. With the implementation of Conservation Levine the patient will undergo a gradual learning process which is divided into four phases. So the difference in the increase of Self Care Behavior in both groups due to differences in the way of health education implementation. In which the treatment group receive health education by using the concept of conservation Levine while the control group only receive health education as was done in the health care center.

CONCLUSION

Nurses can apply levine's conservation in conducting health education to patients with type 2 diabetes that will further

improve the management of diabetes independently by the patient and family. Advanced research in a longer period of time, such as longitudinal studies or randomized controlled trials with larger sample can be carried out to evaluate the effect of conservation levine on Self Care Behavior of patients with type 2 diabetes in-depth advanced research can be done to evaluate other factors the effect on self-efficacy, such as: internal factors and external of the patient, such as: demographic factors and ethnicity of patient, type of personality, quality of social support and others.

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UPDATE HYPERBARIC OXYGEN THERAPY FOR DIABETIC FOOT ULCER: WOUND HEALING, PREVENTION RISK TO AMPUTATION, AND COST EFFECIENCY

A LITERATURE REVIEW

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ABSTRACT

Introduction: Hyperbaric oxygen therapy (HbOT) as adjunctive therapeutic intervention has been shown to improve the rate of wound healing and prevention the risk of amputation. Guidelines for treating these infections have been published to help clinicians decide the best approach. The aims of the present review is to summerize and critically analyze the findings of research studies that focus on the update of hyperbaric oxygen therapy to diabetic foot ulcer for wound healing, prevention risk to amputation, and cost effeciency based on evidence based with the critical appraisal stage. **Method:** Several online bibliographical databases were searched, including Proquest, Ebscho, MedScape[®], PubMed[®], in the range 2010-2015 and using the keyword *hyperbaric oxigen therapy, wound healing, amputation, amputation risk, cost effeciency, diabetic foot ulcer*. **Result:** The searching process left a total of 11 articles relevant for review. **Discussion:** HBOT is just effective for special condition, and it can not prevent absolutely for amputation, but it is potentially cost effective or even cost saving for DFU.

Key words: hyperbaric oxygen therapy, diabetic foot ulcer, wound healing, prevention risk of amputation, cost efficiency

INTRODUCTION

Diabetes mellitus (DM) is one of the most deceitful diseases that affect more than 371 million people all over the world in 2015; by 2030 this will rise to 552 million (Iversen, 2015). In addition to the increasing prevalence, patients with diabetic are faced with numerous complications. Of all diabetic complications, diabetic foot ulcer (DFU) is one of the most devastating and costly (Lavery, 2012). Diabetic foot ulcers (DFU) are a major health problem and an important risk factor for morbidity and mortality among people with diabetes mellitus (Brownrigg et al., 2012). The annual incidence of diabetic foot ulcer is approximetely 1-4 %, and lifetime risk can range from 15 % to as high as 25 % (Bartus & Margolis, 2014). Without early treatment, a foot ulcer may aggravate until it becomes infected and chronic. Chronic wounds are difficult to heal, despite medical and nursing care, and may lead to impaired quality of life and functioning, amputation, or even death (Mayfield, et al., 2014).

In addition, adjunctive therapeutic interventions such as hyperbaric oxygen therapy (HBOT) have been shown to improve the rate of wound healing and prevention the risk of amputation (Londahl, et al., 2011). Many of these patients are referred to specialized wound centers, where hyperbaric oxygen therapy (HBOT) has become a mainstay in healing wounds, especially diabetic foot ulcers (Khrisnan & Baker, 2010). HBOT has been suggested to increase plasma oxygen levels and improve wound healing through the inhalation of 100 percent oxygen at 2.0–2.5 atmospheres absolute (ATA) pressure in a compression chamber (Kranke & Banet, 2012). HBOT has been in use for more than 50 years, it is thought to aid healing by supplying oxygen to the wound (Duzgun, et al., 2013). The efficacy of treatment with HBOT (Hyperbaric Oxigen Therapy) in diabetic foot ulcer has been evaluated for more than 20 years, but its use has never become routine, its use is a reality that in recent years is increasingly consolidating, especially as an adjuvant to conventional therapies

and the NPWT (Negative Pressure Wound Therapy) and dermal substitutes (Chen & Juhn, 2010). In addition, many studies, including some meta-analyzes, documenting the positive role of HBOT in prevention the risk of amputation, although a recent meta-analysis it is clear the short-term benefit, but for the long-term studies would be needed to be so designated such as to minimize any bias (Luciano, Ferrenti, et al, 2010).

There is only limited information available on the economic aspects of adjunctive HBOT for management of DFU. Several cost studies have suggested that use of adjunctive HBOT could produce cost savings (Anderson, et al., 2014). Given the high costs and substantial economic burden incurred with diabetic foot ulcer, optimal strategies for prevention and treatment of diabetic foot ulcer need to be followed (Zamboni, et al., 2014). Guidelines for treating these infections have been published to help clinicians decide the best approach (Kessler, et al., 2013). Its purpose is to critically analyze and evaluations the findings of research studies that focus on the update of hyperbaric oxygen therapy for wound healing, prevention amputation risk, and cost efficiency based on evidence based with the critical appraisal stage.

METHODS

Starts from a question “Is the hyperbaric oxygen therapy for wound healing, prevention amputation risk, and cost efficiency?”. Key search terms included combinations of words such as *hyperbaric oxigen therapy, wound healing, amputation, amputation risk, cost efficiency, diabetic foot ulcer, diabtes melitus*. Several online bibliographical databases were searched, including Proquest, Ebscho, MedScape®, PubMed®, A manual search, based on the reference list of retrieved articles, was also undertaken. Inclusion criteria for the search were primary research studies that discussed the update hyperbaric oxygen therapy for wound healing, prevention amputation risk, and cost efficiency, written in English, and published in peer-reviewed journals between 2010 and 2015. This helped to ensure that the results were of high quality and indicative of recent research in this area. The original series of searches resulted in a total of 60

articles. The citation from each was reviewed, and 30 articles were deemed not relevant, as they did not meet the inclusion criteria. The abstracts of the remaining 30 articles were then reviewed, and 25 were found to be pertinent. Following this, the full text of each of the 25 articles was retrieved and reviewed. Fourteen articles were excluded, as they did not meet all of the inclusion criteria, which left a total of 11 articles relevant for review.

RESULT

Base on 11 article journals reviewed, 5 journals from USA and others are from Poland, Canada, China, Italy, Sweden, and Rhode Island, used various methodes that are literatur review, cohort study, randomize control trial, randomize single center double blinded placebo controlled clinical trial, systematic review and meta-analyzes and also observational study. Each journal article was read thoroughly, and key ideas or codes relevant to the topic were highlighted. Finally, setiap each cateryory filtered and discussed so the content and out come of this review can be new reference.

HBOT and the Fuction

Precise mechanism of action of HBOT in DFU healing has not been uncovered yet. Increased oxygen levels in wound environment instigate healing by a mechanism of angiogenesis. The process involves physical dissolution of oxygen in plasma, leading to increased supply of oxygen to hypoxia-affected tissues. In DFU pathogenesis, local and systemic metabolic disorders lead to abnormal oxygen supply to affected tissues, affecting locally the immunological system and favouring wound infection. Reduced activity of phagocytic macrophages, reduced chemotaxis, and adhesion of neutrophils are observed in DFU. Reduced immunity of tissues favours development of pathogenic bacterial flora, including anaerobic microorganisms. They release toxins causing hypoxia and oedema of tissues (Heinzelmann, et al., 2002; Mader, et al., 1980; Heng, et al., 2000; Thom, et al., 2011 cited by Waniczek, 2013).

Hyperbaric chamber has a bactericidal and bacteriostatic effect. Oxygen administered under increased ambient pressure enhances *in vitro* phagocytosis in regions of limited perfusion by increasing local oxygen tension to levels consistent with normal phagocytic function (Thom, 2011 cited by Waniczek,

2013). At the pressure of 2.5 ATA and respiration with 100% oxygen, its tension in the plasma may be as high as 2000mmHg, causing a 10–15-fold increase in oxygen transport, a 4-fold increase in oxygen diffusion to tissues on the arterial side, and a double increase on the venous side of the capillary circulation (Faglia, et al., 1996; Thom, et al., 2011 cited by Waniczek, 2013). Oxygen is an important cellular signal regulating intracellular and intratissue transformations. Increased oxygen level in chronically hypoxic or ischaemic wounds stimulates proliferation and differentiation of epithelial cells and fibroblasts and collagen synthesis in fibroblasts. Oxygen is a potent proangiogene. The element increases neovascularisation by angiogenic stimulation leading to newblood vessel formation from local endothelial cells and by the stimulation of the systemic stem/progenitor cells to differentiate in the form of blood vessels (Waniczek, 2013). It was demonstrated that HBOT stimulates vasculogenic stem cell mobilisation from bone marrow and recruits them to skin wound (Thom, et al., 2011 cited by Waniczek, 2013). Increased tissue oxygenation during HBOT improves also tolerance to ischemia and reduces metabolic abnormalities in those tissues (Ramon, 1998; Selcuk, 2012 cited by Waniczek, 2013).

HBOT and DFU Wound Healing

HBOT comprises patient inhalation with pure oxygen at the pressure of 2-3 absolute atmospheres ATAs (1 ATA= 14.7 psi, 1 kg per square centimeter, 101.3 kPa, 760 torr, or 760mmHg) provided by appropriate single- and multipatient pressure chambers. A single session lasts for 70–120 minutes, usually 90 minutes, and the number of sessions usually exceeds 20. HBOT-related complications are rare and involve claustrophobia, ear, sinus, or lung damage due to the pressure, temporary worsening of short sightedness, and oxygen poisoning (Thom, et al., 2011 cited by Waniczek, 2013). Besides the commonly known relative and absolute contraindications, transcutaneous oximetry (TcPO₂) is considered an additional criterion of classification for HBOT, treated as a valuable prognostic factor for ulceration treated with the method (Feldmeler & Hampson, 2002 cited by Waniczek, 2013). In DFU patients, the TcPO₂ method-measured oxygen pressure over 400mmHg at 2.5 ATA or over 50mmHg

in pure oxygen environment at normal atmospheric pressure should be perceived as a good prognostic index (Waniczek, 2013).

Many studies shown influence HBOT to DFU wound healing (Table 1). Rielli, et al (2013), melakukan systematic review dan metaanalisis beberapa jurnal yang sesuai dengan kriteria inklusi mereka yaitu randomized controlled clinical trial or comparative observational study comparing systemic HBOT as the intervention to standard wound care (i.e., debridement, dressings, antibiotics, and minimization of pressure on the wound) or sham therapy; human participants (age ≥ 18 years old) suffering from Type 1 or Type 2 diabetes; patient group with nonhealing lower limb ulcers unresponsive to standard wound care (including debridement, glycemic control, antibiotic therapy, and revascularization if necessary); relevant outcomes: rate of wound/ulcer healing, wound size reduction, rate of major amputation (amputation of the lower limb proximal the ankle), rate of minor amputation (amputation of the distal end of foot), safety, and quality of life. This meta-analyses shown from 654 citations identified, 157 articles underwent full-text review. Data were abstracted from twelve publications (six RCTs and six comparative observational studies). Pooled analysis of the RCT and observational data showed that treatment with HBOT reduced the risk of major amputation by 60 percent ($p = .29$) and 61 percent ($p = .003$) compared with standard wound care, respectively. The RCT data revealed that the relative risk of having an unhealed wound following HBOT was 0.54 ($p = .10$) and 0.24 ($p < .0001$) based on observational data.

Liu, et al., (2013), also did a systematic review and meta-analysis from thirteen trials (a total of 624 patients), including 7 prospective randomized trials, performed between January 1, 1996, and April 20, 2012. Pooling analysis revealed that, adjunctive treatment with HBOT resulted in a significantly higher proportion of healed diabetic ulcers compared with treatment without HBO (relative risk, 2, 33; 95% CI, 1, 51-3, 60). From blood circulation evaluation, HBOT also has a significant influence on diabetic patients with chronic non-healing foot ulcers. Londahl, et al. (2010) have shown that in the HBOT group TcPO₂ were significantly lower for patients whose ulcer did not heal as

compared with those whose ulcers healed. A significantly increased healing frequency was seen with increasing TcPO₂ levels in the HBOT group (TcPO₂/healing rate: <25 mmHg/0%; 26–50 mmHg/50%; 51–75 mmHg/73%; and >75 mmHg/100%).

In elderly diabetic patient, HBOT also has a role to heal foot ulcer. Grimaldi, et al., (2013) did observational study in 7 elderly with mean 66 years that got two stages of the treatment (between January and September 2012), at the first stage the patients were treated with medical therapy, surgical debridement, exudate management and stimulation of granulation and epithelialization with advanced wound dressings, wound swabs and orthotics, in a second time were matched HBOT cycles. The follow-up was done by clinical and biochemical controls with particular attention to the glycemic profile and obtaining optimal levels of glycated hemoglobin, and taking cilostazol tablets 100 mg, possibly associated with antiplatelets (cardioaspirin, clopidogrel). They observed that 3 patients needed just two weeks of HBOT, while other 2 ones needed 4 weeks to get the necessary surgical healing of the lesions, seen as complete epithelial regeneration, also evaluated with ultrasound of the foot to highlight the possible persistence of outbreaks internal abscess. Other 2 patients required 6 weeks of HBOT. There were no adverse events. After almost a year, no one has suffered amputation of the limb and in only one case it was observed ulcer recurrence, in January 2013, treated with the same method, and healed in 6 weeks of treatment.

Despite previous studies, a longitudinal observational cohort study by Margalis et al., (2013) that the data taken from the National Healing Corporation (NHC) between November 2005 and May 2011, shown from 6,259 individuals with diabetes, adequate lower limb arterial perfusion, and foot ulcer extending through the dermis, representing 767,060 person-days of wound care. In the score-adjusted models, individuals receiving HBO were less likely to have healing of their foot ulcer (hazard ratio 0, 68 [95% CI 0, 63-0, 73]) and more likely to have an amputation (2, 37 [1, 84-3, 04]). Their additional analyses, including the use of an instrumental variable, were conducted to assess the robustness of our results to unmeasured confounding. HBO was

not found to improve the likelihood that a wound might heal foot ulcer.

HBOT and Prevention Risk to Amputation

A meta-analyses from Rielli, et al (2013) of the 654 citations identified, 157 articles underwent full-text review. Data were abstracted from twelve publications (six RCTs and six comparative observational studies). Pooled analysis of the RCT and observational data showed that treatment with HBOT reduced the risk of major amputation by 60 percent (p= 0, 29) and 61 percent (p = 0, 003) compared with standard wound care, respectively.

The analysis from Liu, et al., (2013) also revealed that treatment with HBO was associated with a significant reduction in the risk of major amputations (relative risk, 0, 29; 95% CI, 0, 19–0, 44); however, the rate of minor amputations was not affected. Adverse events associated with HBO treatment were rare and reversible and not more frequent than those occurring without HBO treatment. A review of 6 studies prepared by Roeckl-Wiedmann et al., (2005) demonstrated that additional application of HBOT reduced the risk of amputation in 118 patients (Waniczek, 2013).

However, Margalis, et al., (2013) also shown their analyses from longitudinal observational that individuals receiving HBOT were more likely to have an amputation (2, 37 [1, 84-3, 04]). Their additional analyses, including the use of an instrumental variable, HBOT was not found to decrease the likelihood of amputation in any these analyses.

HBOT and Cost Efficiency

Lipsky & Berendt (2010), said that HBOT is available in only a minority of communities because it is very expensive. In USA a full course of treatment typically cost \$50,000 (medicare) to \$200,000 (private pay). But limited economic analyses using the lawed primary clinical data have suggested, however, that HBOT is potentially cost effective or even cost saving (Lipsky & Berendt, 2010).

In Canada, Chuck et al., (2008) developed a decision model comparing adjunctive HBOT with standard care alone. The population was a 65-year-old cohort with diabetic foot ulcer (DFU). The time horizon was 12 years taken from a Ministry of Health perspective. The health states were a healed wound with or without a minor lower extremity amputations (LEA), an unhealed

wound with no related surgery, and a major LEA. Efficacy data were based on outcomes reported in studies included in a literature review. Cost and capacity needs for treating DFU patients in Canada were estimated using prevalence data from the literature, and cost and utilization data from government records. Their result shown that the 12-year cost for patients receiving HBOT was CND \$40, 695 compared with CND \$49,786 for standard care alone. Estimated cost to treat all prevalent DFU cases in Canada was CND\$14, 4–19, 7 million/year over 4 years. If seven-person HBOT chambers were used, a further nineteen to thirty-five machines would be required nationally.

DISCUSSION

After reviewing the literatures about the effectiveness of HBO therapy on wound healing in patients with DFU and effectiveness of HBO therapy on the prevention of the risk of amputation in patients with DFU, In a meta analysis conducted by Rui Liu, et al (2013) showed that an adjunctive therapy of HBO increases the likelihood of healing of diabetic foot ulcers and reduce the incidence of major amputations. Besides that, adverse effects on HBO therapy is rare and acceptable. This study supports the concept that an adjunctive treatment with HBO therapy promotes healing of foot ulcers in diabetic patients, especially patients with diabetes mellitus with chronic ulcers and with regard to the value of arterial blood pressure in the lower extremities where patients with arterial blood pressure in the legs as low as 5 mmHg in the group receiving therapy HBO shows the results wounds that do not heal.

Based on research conducted by Daria, et al (2013) RCT study and comparative observational study suggested that the application of HBO therapy reduces major and minor amputation rate, and increase the rate of wound healing in non-healing diabetic ulcers of the lower extremities. There is a statistically significant reduction in amputations and improvement in wound healing when data from observational comparative studies were combined but not significant when data RCT studies were combined for their methodological weaknesses in the research associated with the process of blinding. Based on research conducted by Londahl (2010), about the HBOT on amputations and the

patient in HBOT and placebo group, the risk of amputation is lower in the HBOT group than in the placebo group, but it may happen to both group because amputation is depend on patient foot arterial blood pressure and general condition, which arterial blood pressure ≤ 15 mmHg affected lower limb.

These results are consistent with the theory of the benefits of HBO therapy one of which is for wound healing. In the wounds are part of the body that experienced edema and infection. This edema section are free radicals in large numbers. edema area is experiencing hypo-oxygen conditions due to hypoperfusion. Increased fibroblast that will promote vasodilation in the edema region, then the condition of the injured area becomes hypervaskular, hypercellular and hyperoxia. With high pressure oxygen exposure increased IFN- γ , i-NOS and VEGF. IFN- γ causes CD4 T-cells (TH-1) increased the effect on β -cell resulting in increased Ig-G. With increasing Ig-G, the effect of phagocytic leukocytes will also increase. Thereby granting the HBO on cuts will serve to lower the infection and edema (mahdi, 2009 cited by Yoland, 2015). The mechanism of HBO with fibroblast proliferation and collagen synthesis of Angiotensin. The next effect is as antimicrobial either directly or indirectly. wounds that do not close including diabetic foot ulcers. HBO therapy is used in conjunction with debridimen wounds, wound closure and blood sugar control and administration of appropriate antibiotics (Adityo, 2015) it was supported by the statement in the article that was written by Catherine, (2002) that HBO is an adjunctive therapy and will never replace a major wound care. American Diabetes Association recommends hyperbaric oxygen therapy as an adjunctive therapy for severe injury or threaten the limbs, unresponsive to other treatments, especially if ischemia that can not be corrected with vascular surgery. the results showed the average level of recovery after HBO therapy was 89%, compared with 61% after conventional treatments.

But we found one an article by Margalis et al., (2013), after longitudinal observation for about 6 years at National Healing Corporation (NHC) and the study was review and approved by the Institutional Review Board of the University of Pennsylvania, their result is different from other tudies, in the propensity score-adjusted

models individuals receiving HBO were less likely to have healing of their foot ulcer and more likely to have an amputation. HBO was not found to improve the likelihood that a wound might heal or to decrease the likelihood of amputation in any of their analyses. This finding is significant enough because they used PS approaches to compensate for the lack of randomized treatment assignment as well as instrumental variable analyses to confirm their finding, also the subjects were more than 100 were eligible patients and in longitudinal time.

CONCLUSION

HBO therapy is an adjunctive therapy in patients with DFU that is unresponsive to other treatments, especially if ischemia that can not be corrected with vascular surgery, but now days it needs to be reevaluated. HBO therapy will provide an effect on the condition of good extremity vascular status so it can minimize the likelihood of major or minor amputation but can not prevent absolutely for amputation. Although HBOT is expensive but it is potentially cost effective or even cost saving.

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COACHING SUPPORT INTERVENTION TO IMPROVE COMPLIANCE MANAGEMENT OF TYPE 2 DIABETES MELLITUS

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ABSTRACT

Introduction: Diabetes mellitus (DM) is not curable, but can be managed with four pillars of the DM management. Comply with this rule for life must be so many stressors for patients who fail to comply. Patient compliance to the management of the disease is one indicator of the success of a treatment. Coaching support is the one of method to help, managing, improving, DM type 2 patient and family compliance. The aim of this study was to prove influence of coaching support in improving compliance management of type 2 diabetes mellitus. **Method:** Quasi experiment with pretest-posttest control group design was carried out this study. The subjects were 60 patient of diabetes mellitus type 2 were selected by simple random sampling, and purposive sampling divided in to two group, control group and treatment group. Data were collected by the compliance questionnaire. Coaching Support was given to treatment group during two weeks. Data were analyzed by statistic software, using paired t test for pre-posttest and independent t test, and multiple linear regression with p-value <0,05 was considered significant. **Result:** The analysis showed that there was a significant difference in compliance between the control group and the group treated with p-value = 0.000. Intervention coaching support is the most influential variable for the compliance of patients with type 2 diabetes mellitus with 0,000 sig. **Discussion:** Coaching support able to increase patient compliance support with type 2 diabetes Coaching can be done either because the respondent and family proactive, and will better patient compliance measurement tool type 2 diabetes mellitus is more developed for further research.

Keywords: coaching support, patient of type 2 diabetes mellitus, compliance

THE EFFECT OF INDIVIDUAL AND FAMILY SELF MANAGEMENT ON HEALTH LOCUS OF CONTROL WITH DIABETIC FOOT ULCERS

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ABSTRACT

Introduction: Diabetic Foot Ulcer (DFU) is one of the most common complications of Diabetic Mellitus (DM) which spending a lot of costs and decreasing life quality of DM patients. DFU treatment serves to prevent and minimize the acute and chronic complications that affect the behavior of self and Quality of Life (QoL). Therefore, the purpose of this study was to reveal whether the self-management of individuals and families includes the process of self-management (knowledge and belief, the ability of self-regulation, and social facilities), the proximal (self-behavior) include a summary of the activity of self-care diabetes in participants DFU effect on health locus of control (HLOC) with DFU complication in Bantul, Yogyakarta. **Method:** Non-random sampling technique was used in this research, namely by purposive sampling method. The criteria of research samples were 30 individuals aged ≤ 69 years. Data of this study was collected by questionnaire and analyzed by Statistical Multiple Regression analysis ($p < 0.05$). **Results:** The result showed that the health locus of control of DFU patients not significantly influenced by the knowledge and belief ($p = 0.069$). Meanwhile, DFU patient's health locus of control significantly influenced by self-regulation ability ($p = 0.022$), self-care activities ($p = 0.037$), and social facilities ($p = 0.028$). Furthermore, multiple regression analysis showed that determination coefficient was 0.738. **Discussion:** It can be concluded that most DFU patients which had health locus of control influenced by the ability of self-regulation, social facilitation and self-care activities.

Key words: *diabetic foot ulcer, self management, health locus of control.*

INTRODUCTION

Diabetes mellitus (DM) is worldwide most common metabolic syndrome. DM characterized by increased blood glucose levels. More than 23 million people have diabetes in the United States (CDC, 2015). In Indonesia, there were 10 million cases in 2015. Prevalence of diabetes in the world as many as 415 million people in 2015 and is expected to increase five-fold by 2040 (IDF, 2016). Diabetic Foot Ulcer (DFU) is one of the most serious DM complications; which spending a lot of costs and decreasing life quality of DM patients (Monteiro-Soares, 2014). Diabetes mellitus patients which are experiencing DFU is estimated about 25%. It is estimated that over one million people with diabetes have amputations each year. In 2005 reported major amputations due to diabetes in the world's population every 30 seconds (Singh et al., 2005).

DFU treatment serves to prevent and minimize the acute and chronic complications that affect the behavior of self and QoL. Based on Dressing research (2015) DFU patients experience problems such as boredom in the implementation of such treatment with a family, feel a burden on the family, low self-esteem, and lack of knowledge in the treatment at home (Rias, 2015). Stress and fear of death making the DFU persons seeking treatment for cured. Firman (2013) in his study mentions that the DFU patients tend to use coping strategies such as undergoing medical treatment, pray, resigned to live, reduced activity, and changing eating patterns become more healthy as attempt to deal with the disturbance suffered. It affects the quality of life but DFU patients still perform medical treatment to keep him alive despite experiencing stress, so it will affect health behavior. Based Ginitasasi (2010) health

behaviors are divided into three groups: the behavior of health care, health-seeking behavior and the use of the facility or the health care system, and environmental health behavior. Personal control is one of the factors that influence the health behavior of individuals. One approach in measuring personal control of individuals with regard to health is the approach of the health locus of control (Subihariyono & Goddess, 2013).

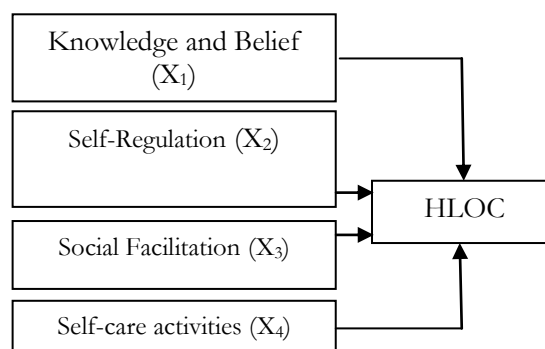
Health locus of control can be defined as the degree of belief of individual's health in the controlled internal and external factors. Internal factors refer to the belief that a direct outcome is the result of the behavior of the individuals themselves. In the other hand, external factor refers to the belief to another power influence (powerful others) and luck (chance). Several studies have correlating health locus of control with healthy behaviors. Lawson, (2011) also mentions that health locus of control influence the management of individuals to make decisions regarding their health. Based on those literature review, it can be assumed that the self-management of individuals and families in DFU participants in the low category so that it can be seen from the health locus of control.

This study was aimed to reveal whether the self-management of individuals and families includes the process of self-management (knowledge and belief, the ability of self-regulation, and social facilities), the proximal (self-behavior) include a summary of the activity of self-care diabetes in participants DFU effect on health locus of control with DFU.

METHOD

This study was pre-experimental research. Non-random sampling technique was used in this research, namely by purposive sampling method. The criteria of research sample was 30 individuals aged ≤ 69 years which were not hearing-impaired and blind, had a caregiver who lives in one house. Data was collected by questionnaire. The data analysis method used in this study include the phase measurement and interpretation of the self-management value of individuals and families includes the process of self-management (knowledge and belief, the ability of self-regulation, and social facilities), the proximal (self-behavior) as well as the activity of DM self-care summary, the next stage of

statistical tests include bivariate correlations test of forth antecedents of individual and family self-management with DFU patients health locus of control (Figure 1).



Figures 1 Study Variables

Questionnaires filled in the questionnaire data sheet self-management of individuals and families who tested the validity of the results $p < \alpha$ (0.05) and test the results of rehabilitation with Alpha Cronbach $r \geq r$ table. Questionnaires health locus of control by 0728 it shows that this measure is reliable and consistent (table 1). Furthermore, data from the questionnaire were analyzed using descriptive statistical analysis with SPSS to see whether there is a relationship between knowledge and belief, self-regulation, self-facilitation, self-care activities with High Locus of Control .

Tabel 1 Questionnaire Reliability Test

No	Kuesioner	Cronbach Alpha Value
1	Questionnaire A (Knowledge and Belief)	0,900
2	Questionnaire B (Self-regulation)	0,880
3	Questionnaire C (Social Facilities)	0,923
4	Questionnaire D (Self-care activities)	0,917

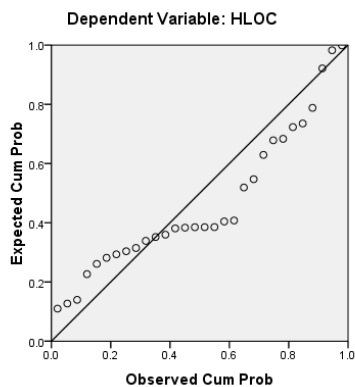
Gitawati (2013)

RESULTS

DFU is one of the most serious and costly complications of diabetes mellitus. Amputation of the lower extremity or part of it is usually preceded by a foot ulcer. A strategy that includes prevention, patient and staff education, multidisciplinary treatment of foot ulcers, and close monitoring can reduce amputation become main focus of several countries and organizations, such as the World Health Organization and the

International Diabetes Federation (Bekker *et al.*, 2012).

This research was conducted to reveal the relationship between knowledge and belief, the ability of self-regulation, social facilities, and patient self-care activities with HLOC. Normality of the data of this study is presented in Figure 2.



Figures 2. P-Plots Regression Residual

Figure 2 is a graph of normal P plot that indicates that the data in this study are normally distributed. Respondents have a self-management behavior in moderate categories which is dominated by the respondents who had high health locus of control. Health locus of control most of respondents in the moderate category and within those categories are dominated by respondents who also have moderate self-management behavior.

The Pearson correlation test then performed to the data to examine the relationship between variables. Correlation analysis results are shown in Table 2. Interesting results obtained from the table 2, it showed a strong correlation between self-care, social facilitation, and self-regulation with HLOC shown of correlation values, respectively for 0.888, 0.898 and 0.892. In the other hand, correlation values of knowledge and belief with the HLOC is 0.160. It is lower than specified p value < 0.05 .

Tabel 2. Pearson Correlation between Self regulation, Social Facilitation, Self care, Knowledge and Belief with HLOC of DFU patients in Bantul Yogyakarta

	SELF_ REGU HL LATIO N	SOCIAL_FA CILITATION	SELF_ CARE	KNOWLED GE_BELIEF
HLOC	1.000	.892	.889	.160
SELF_REGU LATION	.892	1.000	.882	.188
SOCIAL_FA CILITATION	.889	.882	1.000	.125
SELF_CARE	.888	.883	.880	1.000
KNOWLEDGE_B ELIEF	.160	.188	.125	.132

KNOWLEDGE_BELIEF	.16	.188	.125	.132	1.000
HLOC	.000	.000	.000	.000	.199
SELF_REGULATION	.000	.000	.000	.000	.160
SOCIAL_FACILITATION	.000	.000	.000	.000	.255
SELF_CARE	.000	.000	.000	.000	.244
KNOWLEDGE_BELIEF	.199	.160	.255	.244	.000
HLOC	30	30	30	30	30
SELF_REGULATION	30	30	30	30	30
SOCIAL_FACILITATION	30	30	30	30	30
SELF_CARE	30	30	30	30	30
KNOWLEDGE_BELIEF	30	30	30	30	30

In accordance with previous result, the significance value of each dependent variable to high locus of control is shown in Table 3. Based on Table 3, the significant value of the knowledge and belief of the Health locus of control is 0.686, which means higher than constants $P < 0.05$. Meanwhile, other variables show significance value under constant value of $p < 0.05$. It means the ability of self-regulation, social facilitation, and self-care activities simultaneously and significantly affect the dependent variable of health locus of control of DFU patients in Bantul Yogyakarta. The value of the significance of the ability of self-regulation, social facilitation, and self-care activities on health locus of control of DFU patients in Bantul Yogyakarta respectively were: 0.004, 0.006, and 0.022.

Table 3 Contribution of Self regulation, Social Facilitation, Self care, Knowledge and Belief with HLOC of DFU patients in Bantul Yogyakarta

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.667	2.208		.755	.457
SELF_REGULATION	.398	.125	.400	3.194	.004
SOCIAL_FACILITATION	.320	.108	.331	2.974	.006
SELF_CARE	.264	.108	.270	2.446	.022
KNOWLEDGE_BELIEF	.014	.035	.008	.409	.686

Table 3 Contribution of Self regulation, Social Facilitation, Self care, Knowledge and Belief with HLOC of DFU patients in Bantul Yogyakarta

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KNOWLEDGE_BELIEF	.014	.035	.008	.409	.686

a. Dependent Variable: HLOC

Multiple Regression analysis result also showed significance of regression equation. Furthermore Adjusted R^2 was 0.760 or 76%, this means that the variation of health locus of control of DFU patients in Bantul Yogyakarta (Y) which can be explained by the regression equation is 76% influenced by independent variables: knowledge and belief, the ability of self-regulation, facilitating social and activity. The remaining 24% is estimated to be influenced by other variables outside this study.

DISCUSSION

DFU is one of the most serious and costly complications of diabetes mellitus. Several countries and organizations, such as the World Health Organization and the International Diabetes Federation, have set goals to reduce negative impact of DFU that includes prevention, patient and staff education, multidisciplinary treatment of foot ulcers, and close monitoring (Bakker *et al.*, 2012). Several factors has been identified to increase HLOC of patients including knowledge and believe, self-care, social-facilitation and self-regulation (Bryan *et al.*, 2007; Busseri *et al.*, 2003; Carey *et al.*, 2004; Rhodianto, 2011, Ryan, 2009; Skarbek, 2006). This research was specifically aimed to reveal the simultaneous contribution of knowledge and belief, the ability of self-regulation, social facilitation, and self-care activities with HLOC of DFU patients in Bantul Yogyakarta.

The result showed that there is strong correlation between self-care, social facilitation, and self-regulation with HLOC of DFU patients in

Bantul Yogyakarta (Table 3). DM treatments especially with DFU complication will be enhanced by positive behavior of DFU patients, especially on diet control and maintain healthy life style (Dellasega *et al.*, 2012). According to Ryan & Sawin (2009) individual and family self-management is the process of behavior change in patients and families through health education includes the process of self- management (knowledge and belief), the proximal (self-behavior) and distal outcomes (QoL). This result is consistent with study of the Firman (2012) that described open, deep and wide DFU can change the patient's self-image. Respondents had negative view on the wound in their body. Especially if accompanied by amputation in which some part of the body will disappear and make major changes in his life that led to change the way of life of an individual. Furthermore DFU patients also experience changes of the level of independence, so patients need help from others and sometimes had to be helped by others when performing independently activities. This causes the reduction of patient self-esteem.

The management of diabetes mellitus (DM) largely depends on patients' ability to self-care in their daily lives, and therefore, patient education is always considered an essential element of DM management. Studies have consistently shown that improved glycemic control reduces the rate of complications and evidence suggests that patients, who are knowledgeable about DM self-care, have better long term glycemic control (Al-Maskari, 2013, McPerson, 2008). Interesting result from this research showed that knowledge and belief has low correlation with health locus of control of DM patients with DFU in Bantul Yogyakarta compared to self-regulation, self-care activities and social facilitation (Table 2).

It is clear that the quality of life of patients interrupted due to body negative image of disease conditions and self-esteem are reduced due to the reduced level of independence. Based on interviews with DFU patients, showed that not only the declining of life quality due to the psychological effects received by the patient, but also the patient feels spiritual growth in his life caused of the resignation and hope of a cure by praying to make the quality of spirituality life improved (Rias, 2014).

CONCLUSION AND RECOMMENDATION

From this study, it can be concluded that most DM patients with DFU complication in Bantul Yogyakarta had moderate health locus of control that can be influenced by the ability of self-regulation, social facilitation and self-care activities.

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FACTORS AFFECTING THE INCIDENCE OF PULMONARY TUBERCULOSIS IN CHILDREN IN PUSKESMAS OF EAST PERAK SURABAYA

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ABSTRACT

Introduction: Pulmonary TB is a bacterial infection that caused by *Mycobacterium tuberculosis*. Factors that affect TB to the children are the child age, gender, contact history, nutrition stats, and economical status. The purpose of this research is to discover the most dominant factor on the the Pulmonary TB phenomenon. **Method:** The research design is analytic observation, with the *Cross Sectional* approach. The population that is used in this research is children that are diagnosed suspect and the pulmonary TB. The Samples are 57 childrens who experiencing pulmonary TB symptoms, that are chosen by *Simple Random Sampling*. Data collection instrument in this research uses questionnaire sheets. The data analyzing used factors analysis and presented in table. **Result:** The result from *chi square* test shows that there is significance relation between contact history with pulmonary TB phenomenon ($\rho=0,034$), and economical status ($\rho=0,017$). While there is no relation between children age factors with pulmonary TB ($\rho=0,336$), gender ($\rho=0,122$) and nutrition stats ($\rho=0,718$). From the result of the research, it is found that the most dominant factors beased on *Binary Logistic Regression* test is economical status shown by index $\rho=0,013$ ($\rho < 0,05$). **Discussion:** The decrease of pulmonary TB incident to the children can be achieve if the knowledge of family about TB are enough to do the prevention of the TB symptoms. It is suggested that health department increases the information spread by health counseling about the pulmonary TB.

Key words: pulmonary TB, children, factors

INTRODUCTION

Pulmonary tuberculosis is an infectious caused by *Mycobacterium tuberculosis* (Ngastiyah, 2005). Pulmonary tuberculosis in infants and children is also called primary tuberculosis and is a systemic disease. Primary tuberculosis usually begin slowly so difficult to determine when the first symptoms occurs. Sometimes the symptoms was fever and is often accompanied by signs of an upper respiratory tract infection (Ngastiyah, 2005).

Number of patients with pulmonary tuberculosis in children in East Java has reached 2,342 patients and as many as 1,308 of them already died (Dinkes 2013). Number of patients with pulmonary tuberculosis in Surabaya reached 4,336 patients (Dinkes 2014). In 2014, the number of children who have been examined for pulmonary tuberculosis in East Perak Public Health Center as many as 67 children. 12 children (17%) of them BTA (+) status, while 55 children (83%) with suspected pulmonary tuberculosis status. Based on the preliminary study on February 4,

2015 against five parents who visit the East Perak Public Health Center in Surabaya to undergo pulmonary tuberculosis treatment to children aged less than 5 years, got three parents who earn less than Rp 2.2 million (distric minimum wage in 2014), namely by Rp.1.500.000, Rp 2,000,000 and Rp 1,750,000. 2 parents remaining income in accordance with the distric minimum wage.

The main factor a person can become infected after inhaling air containing droplets containing *M. tuberculosis* bacteria are transmitted by smear pulmonary tuberculosis patients positif. Droplet containing TB bacilli resulting from coughing can float in the air up to approximately two hours depending on the quality of ventilation, if droplets inhaled by healthy people, the droplet will be stranded on the walls of the respiratory system. When an infected person coughs or sneezes, germs and smear positive pulmonary TB were shaped very small droplet will fly in the air. If the droplet is superbly inhaled and lodged in the lungs of children, then the bacteria will divide

or multiply. Kids are very vulnerable age group infected with pulmonary TB disease, it is partly because their immune systems are still developing and not yet perfect. In addition, close contact and prolonged with adult pulmonary TB patients who live at home, also facilitates the spread of pulmonary tuberculosis. This is understandable, because the son who has been infected with *M. tuberculosis* easily develop into pulmonary TB disease if they are poor nutritional status. Currently, amid pressure economic conditions with high inflation rates and rising prices of basic necessities, predicted a growing number of poor families. This condition will certainly improve the development of children with severe malnutrition (Rev. 2008). Source of TB infection in children is most important is exposure to infectious yng adult, especially with smear positive. Hiswani (2009) says that exposure of pulmonary TB disease in a person affected by several factors such as socioeconomic status and nutritional status.

Key to the success of TB control in children is the right treatment. One way to reduce the rate of transmission is by distancing individuals infected with TB susceptible populations, while increasing the healing rate necessary maximal treatment. Socio-economic improvements, and improving the quality of life can reduce the number of tuberculosis patients in children. Expected active efforts examination, especially in high-risk groups and malnutrition status to reduce the risk of contracting tuberculosis. In addition to providing immunizations to prevent TB disease, parents should also pay attention to good nutrition for children. Giving a good balanced nutrition coupled with BCG immunization is expected to be a weapon powerful enough to ward off attack TB bacteria (Mufidah, 2012). The incidence number of tuberculosis in children can be decrease by giving sufficient knowledge about TB family for TB preventive action so that the health department suggested that further improve the provision of information through health education about pulmonary tuberculosis.

Factors that influence the occurrence of pulmonary TB are as follows: According Nugrahaeni (2011), these factors can be grouped into three main factors, namely host factors (host), the agent (agent) and the environment (environment).

1. Host : Age, Sex, Contact history, Nutritional status, Economic status
2. Agent : *Mycobacterium tuberculosis*
3. Environmental factors : exposure. Air temperature and humidity

Based on the explanation above, the researchers tried to further examine the factors that influence the incidence of pulmonary tuberculosis in children in the health center East Perak Surabaya.

METHODS

This research using analytical methods Observational study design which were observed to identify whether the independent variables which include age, gender, economic status, contact history, and the nutritional status that affects the dependent variable (incidence of children with pulmonary TB). This study was done by cross-sectional by measuring the observed data or independent variables (age, sex, nutritional status, contact history, and economic status) and dependent (TB incidence) only one at a time. Populations in this study were children with suspected pulmonary tuberculosis and pulmonary tuberculosis in the health center East Perak Surabaya in 2014 as many as 67 children. The sampling technique used in this study is simple random sampling. The sample in this research were 57 children with criteria that has complete data in medical record in East Perak Surabaya health center. The research was conducted on May 13, 2015 in East Perak Surabaya Health Center.

RESULT

1. Age

Table 1. Cross Tabulation Between Age and incidence of pulmonary TB in East Perak Health Center Surabaya period May 13-June 3, 2015

Age	Pulmonary TB					
	TB +		TB Suspect		Total	
	F	(%)	F	(%)	F	(%)
< 5th	4	15,4%	22	84,6%	26	100%
>5 th	8	25,8%	23	74,2%	31	100%
Total	12	21,1%	45	78,9%	57	100%

Chi Square test ($p = 0,336$ p value > 0,05)

Table 1 show that in children aged > 5 years there were 23 children (74.2%) had

suspected, 8 children (25.8%) had pulmonary tuberculosis. Chi-square test results show the value of $p = 0.336$ (p value > 0.05) was no statistically significant correlation between age children with pulmonary tuberculosis incidence.

Possible toddler to be infected and cause illness are very high. Before puberty primary infection found in the lungs. According Rahajoe (2012) ≤ 5 year-old son had a greater risk of having the infection into tuberculosis because of its cellular immunity has not fully developed (immature).

2. Sex

Table 2. Cross tabulation Between Sex and Pulmonary TB incidence in East Perak Health Center Surabaya period May 13-June 3, 2015

Sex	Pulmonary TB					
	TB +		TB Suspect		Total	
	F	(%)	F	(%)	F	(%)
Boys	6	15,4%	33	84,6%	39	100%
Girls	6	33,3%	12	74,2%	18	100%
Sum	12	21,1%	45	78,9%	57	100%

Chi Square test ($p = 0,122$ p value $> 0,05$)

Table 2 show that there were 33 boys (84.6%) had suspected, 6 boys (15.4%) had pulmonary tuberculosis. While the girls found there were 12 girls (66.7%) had suspected, 6 girls (33.3%) had pulmonary tuberculosis. Chi-square test results show the value of $p = 0.122$ (p value > 0.05) so it's mean there were no statistically significant correlation between sex with pulmonary tuberculosis incidence.

The development of pulmonary tuberculosis infection becoming tuberculosis pulmonary disease in women more quickly than men. (WHO, 2010). It still requires further investigation and research, both at the behavioral, psychological level, the immune system, as well as the molecular level. For the time being, allegedly female gender is a risk factor are still require evidence in each region, as the basis for the control or management basis. (Wadjah, 2012)

3. History Contact

Table 3. Cross tabulation Between Children's History Contact and Incidence of pulmonary TB in East Perak health

center Surabaya period May 13 - June 3, 2015

History Contact	Pulmonary TB					
	TB +		TB Suspect		Total	
	F	(%)	F	(%)	F	(%)
Yes	12	27,3	32	72,7	44	100
No	0	0	13	100	13	100
Sum	12	21,1	45	78,9	57	100

Chi Square test ($p = 0,034$ p value $< 0,05$)

Table 3 show that children who have a history of contact as many as 44 children, out of the 44 children found there were 32 children (72.7%) had suspected, 12 children (27.3%) had pulmonary tuberculosis. Chi-square test results show the value of $p = 0.034$ (p value < 0.05) there was statistically significant correlation between a history of contact with pulmonary TB incidence.

The main source of TB infection in children is exposure to adults who infectious, especially with positive BTA, extensive infiltrates, lots and diluted sputum production, productive cough and strong, and the environmental factors particularly unhealthy air circulation is not good. Data from adult pulmonary TB patients in 2014 in the health center East Perak counted 74 adult pulmonary TB patients who have been diagnosed with BTA (+). So, pulmonary TB in children are closely related from pulmonary tuberculosis disease in adults.

4. Nutritional Status

Table 4 Cross Tabulation Between Nutritional Status and Pulmonary TB incidence in East Perak health center Surabaya period May 13 - June 3, 2015

Nutritional Status	Pulmonary TB					
	TB +		TB Suspect		Total	
	F	(%)	F	(%)	F	(%)
Severe malnutrition	1	25	3	75	4	100
malnutrition	2	12,5	14	87,5	16	100
normal	9	25	27	75	36	100
Obesity	0	0	1	100	1	100
Sum	12	21,1	45	78,9	57	100

Chi Square test ($p = 0,718$ p value $> 0,05$)

Table 4 show that children whom in malnutrition condition found that 14 of them (87.5%) had suspected while two children (12.5%) had pulmonary tuberculosis. In children who have poor nutritional status 3 of them (75%) had suspected, and one child (25%) had pulmonary tuberculosis. The results show the value of chi-square $p = 0.718$ (p value > 0.05), there was no statistically significant correlation between nutritional status and the incidence of pulmonary tuberculosis.

Children who malnutrition decline their cellular immune response so it is very easy to get an infection mycobacteria, viruses and fungi, it is certain that the immune response in humans is strongly influenced by the severity of the nutritional condition and age. (Subowo, 2013). Researchers assumed that the nutritional status of children is very important, because a good nutritional status will improve the endurance and the immune system, so they are not likely to develop TB disease. But if a child with a good nutritional status are also infected, they tend to suffer mild TB compared with malnutrition.

5. Economic Status

Table 5. Cross Tabulation Between Economic Status and Incidence of pulmonary TB in East Perak health center Surabaya Period May 13 to June 3 201

Salary	Pulmonary TB					
	TB +		TB Suspect		Total	
	F	(%)	F	(%)	F	(%)
< Wage Minimu	10	33,3	20	66,7	30	100
\geq Wage Minimum	2	7,4	25	92,6	27	100
Sum	12	21,1	45	78,9	57	100

Chi Square test ($p = 0,017$; p value $< 0,05$)

Table 5 show that parents with economic status less than the minimum wage by 20 children (66.7%) had suspected, 10 children (33.3%) had pulmonary tuberculosis. While the economic status of children over UMK many as 25 children (92.6%) had suspected, two children (7.4%) had pulmonary tuberculosis. Chi-square test results show the value of $p = 0.017$ (p value < 0.005) there was statistically significant correlation between

economic status with the incidence of pulmonary tuberculosis.

Researchers assumed that the low economic level indicates a low level of education, employment and income that can affect one's health. With a lack of education, the knowledge of the disease, especially of pulmonary TB disease is also less.

6. Binary Logistic Regression

Table 6. Binary Logistic Regression Results

No.	Variables	p value	Exp (β)	95% C.I for Exp (β)	
				Batas bawah	Batas atas
Step 1	Age (1)	0.788	0.784	0.133	4.636
	Sex (1)	0.196	0.333	0.063	1.763
	Contact History(1)	0.998	1.288 E9	0.000	
	Nutrition Status (1)	0.263	8.378	0.203	346.082
	Nutritional Status (2)	0.892	1.267	0.042	38.522
Step 2	Nutritional Status (3)	1.000	1.567 6E8	0.000	
	Economic status	0.010	12.02 4	1.815	79.646
Step 3	Age (1)	0.332	0.460	0.096	2.207
	Sex (1)	0.170	0.355	0.081	1.558
	Nutritional Status (1)	0.333	4.424	0.218	89.85 1
	Nutritional Status (2)	0.828	1.345	0.093	19.52 9
	Nutritional Status (3)	1.000	8.652 E7	0.000	
	Economic status (1)	0.027	7.085	1.253	40.07 0
	Age (1)	0.227	0.442	0.101	1.927
Step 4	Sex (1)	0.199	0.392	0.094	1.634
	Economic status (1)	0.040	5.727	1.084	30.25 2
	Sex (1)	0.266	0.457	0.115	1.816
Step 5	Economic status (1)	0.041	5.580	1.075	28.969
	Economic status (1)	0.027	6.250	1.227	31.838
Step 6	Contact History (1)	0.998	7.972 E8	0.000	
	Economic status (1)	0.013	8.333	1.556	44.642

Table 6 show that by using binary logistic regression analysis showed economic status is the most affecting factors the incidence pulmonary tuberculosis. It's found that $p = 0.013$ with OR 8.333 this suggests that the economic status $< Rp 2.200.000$ 8.333 times higher risk than economic status $> Rp 2,200,000$ pulmonary tuberculosis exposure.

According to WHO (2003) in Rahajoe (2012) states that 90% of pulmonary TB patients throughout the country attacked the

lower socioeconomic groups. Low socioeconomic condition will cause high-density living quarters. Condition of the house comprising, occupant density, quality of ventilation and bad lighting can facilitate the transmission of pulmonary TB than any other factor. Droplets containing TB bacilli resulting from coughing can be suspended in the air up to about two hours, if the droplets inhaled by healthy people, the droplet will be stranded on the walls of the respiratory system (Darmanto, 2009).

CONCLUSION

Age, sex, and nutritional status didn't influence the incidence of pulmonary tuberculosis in children in East Perak health centers Surabaya. Economic status and contact history influence the incidence of pulmonary tuberculosis in children in East Perak health centers Surabaya. Economic status was the most influential factors on the incidence of pulmonary tuberculosis in children in East Perak health center Surabaya.

Society is expected to participate in health education conducted by the health service so they have better knowledge in order to know how to prevent vulnerability of several diseases especially pulmonary tuberculosis. Besides providing health education and support, public health services are also expected to conduct strict supervision of medication adherence of pulmonary tuberculosis patients.

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DECREASED INTRACRANIAL PRESSURE WITH OPTIMAL HEAD ELEVATION OF 30 OR 45 DEGREES IN TRAUMATIC BRAIN INJURY PATIENTS (LITERATUR REVIEW)

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ABSTRACT

Introduction: Intracranial pressure (ICP) can be elevated in traumatic brain injury. Raised ICP is a life threatening conditions. Unless recognized and treated early to reduce cerebral perfusion pressure (CPP) and progress to brain herniation and death. Management of elevated ICP is, in part, dependent on the underlying cause. The purpose of this literature review was to find a management of a noninvasive physical intervention procedural for decreasing intracranial pressure for brain injury and reduce the duration of treatment invasive. **Method:** Systematic searches were undertaken using Medline database, PubMed and Cochrane, restricted from 2011 to 2016. There 12 articles included by searching through the appropriate key word topic, but only 5 articles were selected based on the inclusion criteria. **Results:** Medical options for treating elevated ICP include head of bed elevation, IV mannitol, hypertonic saline, transient hyperventilation, barbiturates. A head elevation of 30 or 45 degrees is optimal for decreasing intracranial pressure. **Discussion:** Head elevations of 30 or 45 degrees is optimal a conventional nursing of a noninvasive physical intervention procedure for decreasing intracranial pressure for brain injured. Is the most effective management that showed simple, inexpensive treatment procedure and can be applied in variety ages today, independent nursing intervention without side effect. Recommended in clinical practice, intensive care unit staff members need to cautiously perform head elevation of 30 or 45 degrees its physiologic effect and potential hazard.

Key words: *management intracranial pressure, head elevation, traumatic brain injury patients*

INTRODUCTION

Traumatic brain injury (TBI) and its complications are the leading of mortality and morbidity. In the US alone over 2,300 deaths, 42,000 hospitalizations, and 404,000 Emergency Department visits occurs annually among children 0 -14 years old related to TBI. Mortality with severe TBI is often the result of a refractory increase in intracranial pressure (ICP). Therefore prevention and management of raised ICP is increasingly recognized as central to current neuro-critical care. Increased ICP is an important caused of secondary brain injury in TBI and both degree and duration of high ICP is associated with poor outcomes. Sustained increased to 20 mmHg for >5 min may need treatment. Though the efficacy of treatment based on ICP monitoring has been questioned intracranial pressure (ICP). Increased intracranial pressure (ICP) is associated with worse outcome after traumatic brain injury (TBI). The current guidelines and management strategies are aimed at maintaining adequate cerebral perfusion

pressure and treating elevated ICP⁶. Intracranial pressure (ICP) can be elevated in traumatic brain injury.

Management of elevated ICP is, in part, dependent on the underlying cause. Medical options for treating elevated ICP include head of bed elevation, IV mannitol, hypertonic saline, transient hyperventilation, barbiturates, and if ICP remains refractory, sedation, endotracheal intubation, mechanical ventilation, and neuromuscular paralysis. Surgical options include CSF drainage if hydrocephalus is present and decompression of a surgical lesion, such as an intracranial hematoma/ large infarct or tumor, if the patient's condition is deemed salvageable³. The purpose of this literature review was to find a method and technique of a noninvasive physical intervention procedural for decreasing intracranial pressure for brain injury, reduce the duration of treatment invasive, and reduce the cost of treatment. Head elevation a conventional nursing procedure for brain injured individuals with intracranial

hypertension. It is performed with the intent of reducing intracranial pressure (ICP) by means of a noninvasive physical intervention. Head up position may have beneficial effect on intracranial pressure (ICP) via changes in mean arterial pressure (MAP), air way pressure, central venous pressure and cerebral spinal fluid displacement. However, in some circumstances head up position may decrease MAP with in turn will result in a paradoxical rise in ICP through auto regulation the degree of head elevation has to be titrated by evaluating the most adequate cerebral perfusion pressure (CPP) for each patient by means of trans cranial. A change in head position can lead to a change in intracranial pressure, however, there a conflicting data regarding the optimal degree of elevation that decreases intracranial pressure in post craniotomy patients. Patients with increased intracranial pressure significantly benefitted from a head elevation of 10, 15,30 and 45 degrees compared with 0 degrees. A head elevation of 30 or 45 degrees is optimal for decreasing intracranial pressure. Recommended in clinical practice, intensive care unit staff members need to cautiously perform head elevation of 30 - 45 degrees with a thorough understanding of its physiologic effect and potential hazard⁴.

METHOD

A literature review revealed that studies have been conducted in a range of countries by using a variety of management to screen learners decrease intracranial pressure for traumatic brain injury patients. It was conventional nursing of a noninvasive physical intervention procedure for decreasing intracranial pressure for brain injured reduce the duration of treatment invasive, and reduce the cost of treatment.

A head elevation of 30 or 45 degrees is optimal for decreasing intracranial pressure. Is the most effective management that showed simple, inexpensive treatment procedure and can be applied in variety ages today, independent nursing intervention without side effect. It was conventional nursing of a noninvasive physical intervention procedure for decreasing intracranial pressure for brain injured. According to research J. Adv Nurs (2015) that a changes in head position can lead to a change intracranial pressure. Compared with a degree 10,15,30 and 45 degrees of head elevation resulted in lower intracranial

pressure. Intracranial pressure at 30 degrees was not significantly different in comparison to 45 degrees of head elevation and was lower than at 10 and 15 degrees. Patients with increased intracranial pressure significantly benefitted from a head elevation of 10, 15, 30 and 45 degrees compared with 0 degrees. A head elevation of 30 or 45 degrees is optimal for decreasing intracranial pressure⁴. According to research Agbeko RS, et al (2012) that in severe pediatric traumatic brain injury, the relations hip between change in head of the bead and change in intracranial pressure was negative and linier. The lowest intracranial pressure was usually, but not always, achieved at highest head of the bed angles depend, in parts, on the subject's height.

The other therapies to reduce elevated intracranial pressure if ICP not remains refractory used osmotic agents, such as mannitol, hypertonic saline and the other therapies, such as hyperventilation and barbiturates. Recording the research Scalfani, et al (2012) that in cerebral blood flow (CBF) is reduce after severe traumatic brain injury (TBI) with considerable regional variation osmotic agents are used to reduce elevated intracranial pressure (ICP). In 8 patients with acute TBI, we measured regional CBF with positron emission tomography before and 1 hour after administration of equi osmolar 20% mannitol (1 ml/kg) or 23,4 % hypertonic saline (0,686 ml/kg) in regions with focal injury and baseline hypo perfusion CBF < 25 ml per 100 gr/min. Result that osmotic therapy reduce the number of hypo-perfuse brain regions by 40% (p , 0,001) ⁵. Recording the research Mangat HS (2012) that in hyperosmolar agents are commonly used as an initial treatment for the management of raised intracranial pressure (ICP) after several traumatic brain injury (TBI). They have an excellent adverse effect profile compared to other therapies, such as hyperventilation and barbiturates, which carry the risk of reducing cerebral perfusion.

The hyperosmolar agent mannitol has been used for several decades to reduce raised ICP, and there is accumulating evidence from pilot studies suggesting beneficial effects of hypertonic saline (HTS) for similar purposes. In ideal therapeutic agent for ICP reduction should reduce ICP while maintaining cerebral perfusion (pressure). While mannitol can cause dehydration over time, HTS helps maintain normovolemia and cerebral perfusion, a

finding that has led to a large amount of pilot data being published on benefits of HTS, albeit in small cohorts. Prophylactic therapy is not recommended with mannitol, although it may be beneficial with HTS. To date, no large clinical trial has been performed to directly compare the two agents. The best current evidence suggest that mannitol is effective in reducing ICP in the management of traumatic intracranial hypertension and carries mortality benefit compared to barbiturates. Current evidence regarding the use of HTS in severe TBI is limited to smaller studies, which a benefit in ICP reduction and perhaps mortality⁷. According to research Mangat HS, et al (2015) that a Hypertonic saline (HTS) given as bolus therapy was more effective than mannitol in lowering the cumulative and daily ICP burdens after severe TBI. Patients in the HTS group had significantly lower number of ICU days.

RESULTS

Systematic searches were undertaken using Medline database, Pubmed and Cochrane , restricted from 2011 to 2016. There 7 articles included by searching through the appropriate key word topic, but only 3 articles were selected based on the inclusion criteria. Management of raised ICP includes care air way, ventilation and oxygenation, adequate sedation and analgesia, neutral neck position, head end elevation 30 or 45 degrees and short term hyperventilation, and hyperosmolar therapy (mannitol or hypertonic saline) , in critically raised ICP barbitural coma, moderate hypothermia and surgical decompression.

DISCUSSION

Intracranial pressure (ICP) can be elevated in traumatic brain injury. Management of elevated ICP is, in part, dependent on the underlying cause. Medical options for treating elevated ICP include head of bed elevation, IV mannitol, hypertonic saline, transient hyperventilation, barbiturates, and if ICP remains refractory, sedation, endotracheal intubation, mechanical ventilation, and neuromuscular paralysis. Surgical options include CSF drainage if hydrocephalus is present and decompression of a surgical lesion, such as an intracranial hematoma/ large infarct or tumor, if the patient's condition is deemed salvageable.

Intracranial pressure (ICP) can be elevated in traumatic brain injury. Raised ICP is a life threatening conditions. Unless recognized and treated early to reduce cerebral perfusion pressure (CPP) and progress to brain herniation and death. A head elevation of 30 or 45 degrees is optimal for decreasing intracranial pressure. Is the most effective management that showed simple, inexpensive treatment procedure and can be applied in variety ages today, independent nursing intervention without side effect. It was conventional nursing of a noninvasive physical intervention procedure for decreasing intracranial pressure for brain injured.

The other therapies to reduce elevated intracranial pressure used osmotic agents, such as mannitol, hypertonic saline and the other therapies, such as hyperventilation and barbiturates. Mannitol can cause dehydration over time, HTS helps maintain normovolemia and cerebral perfusion. Prophylactic therapy is not recommended with mannitol, although it may be beneficial with HTS. To date, no large clinical trial has been performed to directly compare the two agents. The best current evidence suggest that mannitol is effective in reducing ICP in the management of traumatic intracranial hypertension and carries mortality benefit compared to barbiturates.

CONCLUSION AND RECOMMENDATION

Head elevations of 30 or 45 degrees is optimal a conventional nursing of a noninvasive physical intervention procedure for decreasing intracranial pressure for brain injured. Is the most effective management that showed simple, inexpensive treatment procedure and can be applied in variety ages today, independent nursing intervention without side effect.

In clinical practice, intensive care unit staff members need to cautiously perform head elevation of 30 or 45 degrees its physiologic effect and potential hazard.

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THE RELATIONSHIP BETWEEN DIETARY AND PSEUDODEMENSIA IN THE NURSING STUDENTS OF S1 STUDY PROGRAM OF UNIVERSITY NU SURABAYA

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ABSTRACT

Introduction: Pseudodementia is not normal thing, it can be hindered by addressing the causes, one of them is diet. Students pay less attention to diet so that many students who complained of forgot and confused about what to do. The purpose of this study was to identify the relationship between the diet and the incidence pseudodementia happening to the students of S1 Nursing program at the *University of Nahdlatul Ulama* Surabaya. **Method:** The research used *analytical design*. The population involved 119 6th semester students of S1 Nursing program, and 91 respondents were taken as the sample by using *proportional random sampling technique*. The independent variable of this research was a diet, while the dependent variable was the incidence of pseudodementia events. **Result:** The result of the research showed there is a significant relationship between the diet and occurrence pseudodementia ($\rho = 0:00, \alpha = 0.05$). **Discussion:** Nearly a half of the students of S1 Nursing Program of the University of NU Surabaya have the good diet. Nearly a half of the students of S1 Nursing Program of the University of NU Surabaya suffer from *probable cognitive impairment* which commonly referred to *pseudodementia*. There is a relationship between the diet and the incidence of *pseudo dementia* on the students of S1 Nursing Program of the University of NU Surabaya.

Key words: diet, pseudodementia

INTRODUCTION

Pseudodementia is a condition that similar to *dementia*, but the main cause is depression. In pseudodementia, a person may seem confused, show symptoms of depression such as sleep disorders, memory disorders and other cognitive problems such as *dellirium*. However, memory and language functions normally (Hill, 2008). *Pseudodementia* may occur progressively after reaching the highest growth and development (age 15 years) but a lot of people think *pseudodementia* occur only in the elderly, this syndrome can occur as a result of stress, anxiety, environment and lifestyle. (Brodaty, 2011). In fact, *pseudodementia* may occur among teenagers. They complain of forgetfulness and confusion about what to do.

Data taken from *Encyclopedia Britannica* states that in 2005 there were 24.3 million people around the world suffer from, *dementia*. Nowadays the number increased 35.6 million. This number is assumed to increase by two-fold in 2030, and three times in 2050 (Alzheimer's Disease International, 2009). Marc Wortmann, the executive director

of 78 the Alzheimer's organizations explained that every 4 seconds there is a new patient, and in the future there might be one new case every second in 2050 (Khatijah, 2013). The psychiatry of FKUI RSCM. Martina WS Nasrum explained that in Indonesia it is estimated in 2050 *pseudodementia Alzheimer's* sufferers could reach 3 million cases (Rosary, 2013).

The research conducted by Rahmawati (2014) about the relationship between anxiety with the incidence of *pseudodementia* among s1 second semester students of nursing program of UNUSA, it was revealed that 52.2% of the students have *probable* cognitive impairment or called by *pseudodementia*. From 10 respondents whose age between 18-20 years, it was obtained that the students had experienced often forgotten and sometimes confused what to do, for example: when they want to drink they took a dish, or when they want to run the motorcycle, they took flashdisk instead of key.

Pseudodementia may occur due to various factors including: anxiety, stress, environment, and lifestyle. A person's lifestyle

can be seen from the diet. A healthy diet is rich in vitamins from fruits and vegetables helps to protect the brain and maintain memory. (American Journal of Epidemiological, 1999) (inParetta, 2005). If *pseudodemensia* is not handled immediately this will potentially develop into *dementiain* which someone loss his part of their cognitive (Wells, 1979) (in Chiu & Ames, 2006).

The brain is very easily be broken by free radicals, harmful chemicals which is easily absorbed by the fat,whilethe brain structure mostly consisting of fat. Therefore researchers agree that free radicals caused signs of aging (Paretta, 2005). Affected brain from free radical declines in the number of neurons gradually covering the area of the superior temporal gyrus (the areas that most rapid loss of neurons), gyuspresentalis and srtiata area. Pathologically, the decreasing in the number of cholinergic neurons will cause a reduction in the neurotransmitter acetylcholine, causing cognitive and behavioral disorders.

In order to overcome pseudodemensiasomeone has to cope with the anxiety, understanding its triggers, change negative thoughts and helplessness with an optimistic attitude, no worry about a small problem, talk to friends or family, do exercises, avoid caffeine and sleep regularly. These are essential to be more calm and think clearly (Audinovic,Viscardine, 2013). Keeping a diet is also necessary in order get off pseudodemensia. Having a healthy diet is important for many reasons, one of those reasons is to improve the workings of the brain and protect it from free radical damage. A healthy diet includes schedules, amount and type of food to be consumed. (Paretta, 2005).

METHOD

The method used in this study is analytic. Based on time of the sampling taken this study used cross sectional approach. Researcher analyzed the relationship between independent variables and the dependent variable which is done simultaneously. The population is all the students of S1 Nursing program of UNUSA in the academic year of 2012, the total number is 119, and the sample is 51 respondents.

The samples used in this study was probability sampling with proportional random sampling technique. The location of the research conducted at the Faculty of

Nursing and Midwifery University Nadlatu Ulama Surabaya in April 2015. The independent variable in this study was the diet and the dependent variable in this study was the incidence of pseudodemensia. In this study used a questionnaire on the independent variables (diet) and MMSE in the dependent variable (incidence pseudodemensia).

The data collection method is a researcher ask for an approval and signature of the respondent, if they were willing to be investigated. Then researcher began taking data in the way respondents answered the questions on the questionnaire honestly in accordance with the attitude of the respondents. Data Analysis used SPSS 18 and Spearman Rank Test to test the validity of 0.05.

RESULTS

a. Age

Age (Year)	Frequency	(%)
19 – 20	35	38,5
21 – 22	53	58,2
23 – 24	3	3,3
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents (58.2%) aged were 21-22 years.

b. Gender

Gender	Frequency	(%)
Male	21	23,1
Female	70	76,9
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents almost entirely (76.9%) were female.

c. Ethnicity

Ethnicity	Frequency	(%)
Javanese	80	87,9
Madurese	11	12,1
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents almost entirely (87.9%) ethnicity of Java.

d. Health Status

Health Status in the last 6 months	Frequency	(%)
Ever been Sick	66	72,5
Never been sick	25	27,5
Total	91	100

Source: Primary Data, 2015

It can be seen from the 91 respondents (72.5%) experienced pain in the last 6 months.

e. Stress

Stress	Frequency	(%)
No	53	58,2
Yes	38	41,8
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents almost half (41.8%) experienced stress.

f. Anxious

Anxious	Frequency	(%)
No	45	49,5
Yes	46	50,5
Total	91	100

Source: Primary Data, 2015

It can be seen from most of the 91 respondents (50.5%) experienced anxiety.

g. Residence

Residence	Frequency	(%)
Far away from highway	47	51,6
Near highway	44	48,4
Jumlah	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents almost half (48.4%) reside near the highway.

Typical data include diet and the incidence of *pseudodementia*.

a. Characteristics of respondents based on diet

Diet	Frequency	(%)
Good	28	30,8
Enough	44	48,4
Bad	19	20,9
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents almost half (48.4%) have a good diet.

b. Characteristics of respondents based on events *pseudo dementia*

Pseudo dementia Level	Frequency	(%)
Normal	31	34,1
<i>Probable cognitive impairment</i>	42	46,2
<i>Definite cognitive impairment</i>	18	19,8
Total	91	100

Source: Primary Data, 2015

It can be seen from 91 respondents almost half (46.2%) experienced *probable cognitive impairment*.

Cross tabulation of the relationship between diet and the incidence of *pseudo dementia*

Dietary	Incidence of Pseudodementia (MMSE)			Jumlah N(%)
	Normal N(%)	<i>Probable cognitive impairment</i> N(%)	<i>Definite cognitive impairment</i> N(%)	
Good	26 (92,9)	2 (7,1)	0 (0)	28 (100)
Enough	5 (11,4)	36 (81,8)	3 (6,8)	44 (100)
Bad	0 (0)	4 (21,1)	15 (78,9)	19 (100)
Total	31 (34,1)	42 (46,2)	18 (19,8)	91 (100)

Source : Primary Data, 2015

It can be seen from 28 respondents those who have a good diet is almost entirely (92.2%) did not experience *cognitive impairment* (normal). *Spearman Rank test* results shows that the value $\rho = 0,000$ which means $\rho < \alpha$ then H_0 is rejected, this means that there is a correlation between diet and the incidence of pseudodementia on the students of S1 Nursing Program of the University of NU Surabaya.

DISCUSSION

This section will describe the results of research on the relationship between diet and the incidence of pseudo dementia on the students of S1 Nursing program of the University of NU Surabaya. In accordance with the objectives that have been set. It can be described the discussion as follows:

a. Overview Diet

The Results of research showed that nearly half of respondents (48.4%) have enough diet (good diet). This means the eating habits based on the preference level, frequency, and schedules make students prefer to choose any food just for pleasure such as; instant noodles and fast food, however they ignore the benefits to health. The eating habits caused a problem since the content of nutrients in the food or fast food is not balanced. Food manufacturers often use saturated fats for food processing in order to enhance the aroma and taste.

According Pujiyanti(2005) in general adolescents have poor eating habits. Some teens, especially young women often eats food in unbalanced numbers compared to their needs because they fear of becoming obese.

Pujiyanti also explained that teenagers love to have snack, especially sweet pastries. Meanwhile, the group of vegetables and fruits which contain many vitamins and minerals are not popular among them.

b. The level of Pseudodementia Incidence

Based on the results of research as listed in Table 5:10 it was found that nearly half (46.2%) experienced *Probable cognitive impairment*.

The American Journal of Epidemiological, 1999, in Paretta in 2005, contended that *pseudo dementia* may occur due to various factors including: anxiety, stress, environment, and lifestyle. One of lifestyle can be seen from the diet. A healthy diet rich in vitamins from fruits and vegetables helps to protect the brain and maintain memory. *The antioxidants, A vitamin, C vitamin, and E vitamin* in fruits and vegetables work together to protect the brain and body to immobilize free radicals. *A vitamin, C vitamin, and E vitamin* are also important in improving and maintaining the memory.

c. Eating relationship with Genesis Pseudodementia

Based on the result of *Spearman Rank Test* a significance value of $\alpha = 0.05$. It was obtained the value of $p = 0,000$ which means that $p < \alpha$ then H_0 is rejected, it means that there is a correlation between the diet and with the incidence of *pseudo dementia* on the students of the 6th semester of Nursing Program of the University of NU Surabaya.

From the results above, it showed there is a relationship between the diet and the incidence of *pseudodementia*. This can be concluded that the diet has significant effect on the incidence *pseudodementia*, whereby if a person's diet is good then *pseudodementia* events can be suppressed. In principle, every person has different diets, because he/she has different characteristics in the application of diet. A good diet can reduce the *pseudodementia* in adolescents. A diet which rich in nutrients is the key to add a memory function.

CONCLUSIONS

1. Nearly a half of the students of S1 Nursing Program of the University of NU Surabaya have the good diet.
2. Nearly a half of the students of S1 Nursing Program of the University of NU Surabaya suffer from *probable cognitive*

impairment which commonly referred to *pseudodementia*.

3. There is a relationship between the diet and the incidence of *pseudo dementia* on the students of S1 Nursing Program of the University of NU Surabaya.

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THE CORRELATION BETWEEN THE LEVELS OF ACTIVITIES OF DAILY LIFE WITH STRESS LEVELS AMONG STROKE PATIENTS

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ABSTRACT

Introduction: A stroke resulting in loss of control functions of the brain that affects the paralysis of certain body parts, it may inhibits the activity of daily life. The objective of this study was to identify the correlation between activities of daily life with stress levels of stroke patients. **Method:** This study used correlational analytic. Samples were taken using simple random sampling, with 22 patients in Neurological Wards, Dr. Ramelan Navy Hospital, Surabaya. Data collection was undertaken using *General Health Questionnaire* (GHQ-12) and observation Katz Index. Data were analyzed with Spearman Rank test with significance level of 0,05. **Results:** Results showed that the average of stroke patient decreased partly function in activities of daily life (40,9%), the average experience of stress (59,1%). This study found that there was a significant correlation between activities of daily life with stress levels of stroke patients ($\rho = 0.01$). **Discussion:** Functional decline in activities of daily life as a result of a stroke becomes a stressor for patients. Developing positive coping, range of motion exercise and social support may help patients adapt to the conditions.

Key words: *activities of daily life, stres, stroke*

INTRODUCTION

Stroke is a loss of brain function caused by the cessation of blood supply to part of the brain (Smeltzer & Bare, 2002, cited by Muttaqin, 2008). Stroke patients are often characterized by the absence of some weakness in the body (hemiplegi), wry mouth, loss of speech and psychological disorders such as depression or changes in behavior. Stroke patients become depressed because of paralysis that can not perform activities of daily life. This lack of motivation and expectations of patients' recovery and lack of family support is potentially lead to stress.

METHOD

This study used correlational analytic. This research conducted to identify the correlation between activities of daily life with stress levels of stroke patients. Samples were taken using simple random sampling, with 22 patients in Neurological Wards, Dr. Ramelan Navy Hospital, Surabaya, who have passed the acute phase, cooperative, minimal day care is one day, patients who experience hemiparese, hemiplegic, monoparese, tetraparese, and did not experience aphasia. Data collection was undertaken using

observation Katz Index and *General Health Questionnaire* (GHQ-12). Both activities of daily life and stress levels were observed only one at a time. Katz Index was used to observe the level of stroke patients' ability to perform activities of daily life, which include the adequacy of the implementation of the six functions such as bathing, dressing, toileting, transferring, continent, and eating. General Health Questionnaire (GHQ - 12) by Goldberg, which consisted of 12 item question, contains some of the common symptoms of mental health disorders such as 1) problems in concentrating and decided something, 2) feelings of worthlessness and useful, 3) inability to enjoy the usual activities, 4) feelings of sadness and depression, 5) sleep disorder due to anxiety, stress, or pressure continues, 6) loss of confidence. Each answer given a score of 0 = better or the same as usual, 1 = less than or greatly reduced than usual, have a range of scores 0-12, then the scores were added / total, and can be categorized as distress if ≥ 5 , and declared no stress or normal when < 5 . Data analysis used Spearman Rank test with significance level of 0,05.

RESULTS

Overall, from 22 participants the majority of stroke patients were male (72,7%) and the average age was 65-75 years old (40,9%). Length of stay in Neurological ward mostly was 1-7 days (81,8%). Results showed that on average the study participants

experienced a decline in part a function in activities of daily life (40,9%), and on average, participants experienced stress (59,1%). This study found that there was a significant correlation between activities of daily life with stress levels of stroke patients ($\rho = 0.01$).

Table 1 : Participants characteristic

Characteristic	Frequency	Percent	
Age (Years)	<45 tahun	3	13,6%
	45-<55 tahun	2	9,1%
	55-<65 tahun	8	36,4%
	65-75	9	40,9%
Sex	Male	16	72,7%
	Female	6	27,3%
Marital state	Married	19	86,4%
	Widow	1	4,5%
	Widower	1	4,5%
	Unmarried/single	1	4,5%
Length of Stay	Day 1st - 7th	18	81,8%
	Day 7th - 14th	3	13,6%
	> day 14th	1	4,5%
the ability of muscle strength / paralysis	Parese	13	59,1%
	Plegi	2	9,1%
	Not parese or plegi	7	31,8%
Attack number	First attack	18	81,8%
	Second attack	1	4,5%
	Third attack	3	13,6%

Table 2 : The correlation between activities of daily life with stress levels

Activities of Daily Life	Stress Levels					
	Stress/Distress		Normal/ NoStres		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Full function in activities of daily life	1	14,3	6	85,7	7	100
Partially function decline	6	66,7	3	33,3	9	100
Severe decline in function	6	100	0	0	6	100
Total	13	59,1	9	40,9	22	100

p = 0,01

DISCUSSION

Stroke is a condition that occurs when the blood supply to a part of the brain is suddenly interrupted. If it can be saved sometimes people will experience paralysis of the limbs and difficulty speaking, resulting in inability to carry out activities of daily life (Rosita et.al, 2012).

Results showed that the average stroke patients decreased partly function in activities of daily life as much as 9 participants (40,9%), full function in activities of daily life as much as 7 participants (31,8%), and severe decline in function as much as 6 participants (27,3%). Stroke is a cerebrovascular disease referring to each sudden neurological abnormality due to blood flow congestion or

cessation of cerebral arterial supply system (Price & Wilson, 2005). Researchers assume that the normal aging process that could lead to functional impairment can be reduced by avoiding risk factors (hypertension, smoking, and lack of exercise), in the absence of disease.

This study also found that of the nine participants who experienced a decline in part a function in activities of daily life, the average experienced weakness (parese) due to a stroke (55,5%). This is in line with the statement of Sugiarto (2005) that the activities of daily life is affected by the ROM (Range Of Motion) joints, muscle strength, muscle tone, proprioceptive, visual perception, cognition, coordination, balance, so the researchers assume that the stroke patient decreased

muscle strength and weaknesses will have difficulties to live independently. The majority of stroke patients have always experienced dependence on others in performing activities of daily life - today.

Nadesul (2009) said that the impact of stroke depends on what happens in the brain blood vessels, and vessels of the brain affected, stroke symptoms are different. If there is a blockage of how big the blockage, and the location where the brain vessels are clogged, determine the type and weight of stroke symptoms. Most specifically the emergence of symptoms of paralysis of half the body. When a disturbance in brain vessels left, the symptoms that appear on the right side of the body. Conversely, the right brain vessel disorders, symptoms in the left side of the body. Symptoms of strokes vary in light weight and variety of complaints. Starting from the initial symptoms just tingling, muscle weakness, involuntary movements agile to a more severe form of loss of some field of vision, sudden blindness, annoyance glance, speech disturbances, impaired understand speech, difficulty moving, bedwetting, to coma. This is evidenced by the results of the study that of the 7 participants who have full function in activities of daily life, is largely a stroke patient's first attack (85,7%). Cahyono (2008) explains that a stroke can cause a reduction in strength in all muscle groups from all parts of the body. But the muscles on the face, hands, arms, feet and legs on one side of the body more often affected (hemiparesis).

Paralysis or weakness of the right side of the body part is usually caused by malfunction of the left side of the brain, either because of stroke infark or stroke bleeding. Conversely, if a failure occurs right brain function, eating parts of the body will be left to suffer paralysis. On a mild stroke that sometimes we feel as if it is difficult to control the movement of our limbs, which is often said to be people with movement of the arm or legs become weak. Assumptions researchers on the point that various kinds of paralysis that occurs resulting in decreased function, which is located on the affected part of the brain, resulting in decreased function of various partial and berat.pada interview some patients complain of inability to move parts of the body have weaknesses, causing the patient reluctant to try to exercise, on the part of the body is weak because of ignorance of how to do it, but

not a few patients who have a desire to be able to move the limbs are weak with the help of the family, because it is not used to perform the basic activities for daily living (bathing, toileting, and urinating) on the bed, so that the patient tries to move the limbs that experienced weakness, and boredom perceived as could only lay in bed.

Stroke disease impacts not only in the form of physical limitations but also emotional and psychosocial disorders sufferers, there is the possibility of stroke patients are not mentally prepared to accept the existence of various problems due to a stroke that can lead to stroke patients so stressed. The results showed that the average participants respondent in neurological ward experiencing stress (59.1%), and normal / not stressed (40.9%).

Research Hartigan, O'Connell, McCarthy and O'Mahony (2011) about the perception of stroke patients first attack, said that the patients felt their health had deteriorated as a result of stroke, initially they expressed surprise and fear associated with loss of control of the body to materialize as anger, frustration and optimism.

Stroke patients in the early period of acute become totally dependent on others, namely nurses and family. Response and impact shown assortment can be separate stressors that require adaptation of the patient. Psychological and emotional condition at the onset of pain causing the patient less motivated to get well soon. Once past the acute stage, the patient is also expected to begin to accept what had happened. Weiten (2007), cited by Putra (2011) that every stressor received by individuals will be studied carefully so as to produce the correct perception will eventually responded properly anyway.

Adaptation is an individual effort to overcome the unpleasant circumstances, such as conflict, tension, frustration, or stress on the individual. The aspects of adjustment, is a function of the social, moral, and physical health (Lazarus & Folkman in Santrock, 2004). Not everyone can adjust to these changes, which cause tension or stress on yourself. Results showed that most participants is the first attack of stroke patients (81,8%), in line with Kariasa (2009), which explains that the change of the meaning of life after a stroke, so his life post-stroke patients feel unappreciated, unnoticed life, life useless. Researchers assume

about this, that the stressful factors of stroke patients are not only seen on the inability to perform activities of daily life - the day, but also thinking about the patient's current life after suffering a stroke and decreased due to weakness and lose some of the ability of stroke patients. The patient feels can not work anymore, feel dependent on family and did not feel as strong as before stroke, inability to fulfill the role of family breadwinner, and the burden of thinking for leaving pending work due to illness.

Stroke Impact usually depends on what part of the brain that suffered injury, severity and health status. Severity generated based on the size and location of the bleeding and infarction that occur in the brain, so that it can be known how much functional impairment suffered by the patient. Neurological deficits occur depending on which blood vessels are clogged and the size of the brain area that experienced the inadequate perfusion. Symptoms of a stroke can be physical, psychological and behavioral. The most characteristic physical symptoms are paralysis, weakness, loss of sensation on the face, arm or leg in one side of the body, difficulty speaking, difficulty swallowing and partial loss of vision in one side.

The results showed that of the nine participants who decreased some of the functions in the activities of daily life - today, mostly stressed as many as 6 participants (66,7%), decreased motor function in stroke patients, will have an impact on the ability of activities of daily life. A decrease in activity of daily life also happened in the recovery process, it is in line with Indriyati (2006), which revealed that patients who recover with severe levels of disability can not be independent. Most major life activity need help, even to the most basic activities of life though. This situation became one stressor for stroke patients. Sunaryo (2004) explains that the factors affecting stress are biological factors: heredity, body constitution, physical condition, neurophysiologic and neurohormonal, as well as psychoeducative and socio-cultural factors : the development of personality, experience, and other conditions that affect.

This study found that there was a significant correlation between activities of daily life with stress levels of stroke patients ($p = 0.01$). Stroke patients used to pass through a

series of emotional reaction to the inability of the newly earned. This reaction can develop from disorganization and confusion to deny disability, mourning the loss of function or body parts, anger, depression and finally accept such incompetence. Not all stroke patients through all these stages and these stages can occur at various times and several steps that may not appear at all (Rosita, et al., 2012).

Researchers assume that nurses should recognize when patients appeared ineffective coping and adjustment to the failure of incompetence. This coping mechanism is indispensable as a cognitive and behavioral change efforts to overcome internal and external demands that exceed the capabilities of individuals. A variety of coping strategies can be used among other stroke patients by increasing the fun activities or improve activities of daily life activities that can be done independently by the patient. Stress is also influenced by environmental factors, therefore the support of the family is very important that patients are able to increase their independence in activities of daily life.

According Bastable (2003) during the process of rehabilitation, family education must take place consistently and wisely as most residual damage is not visible, except sensorymotor damage. Stroke patient often suffer because of changes in behavior, personality, and damage to the ability of activities of daily life, as well as cognitive disorders (Idrus, 2007).

Generally stroke continues with depression, meaning that the patient conscious of her condition were not able to perform daily activities as normal, this is due to the problems that arise in people with stroke such as paralysis on one side of the body, decreased or loss of taste (not able to distinguish hot and cold), impaired field of vision, disturbances of perception (difficult to distinguish the shape, size, color), emotional problem (laughing or crying does not correspond to the real situation), communication problems (difficulty in expressing opinions or do not speak at all). Patients often can not deal with the situation, that is why stroke patients need a lot of support to accelerate healing process.

CONCLUSION

A stroke cause various effects both physically and psychologically. Weakness and

dependency in activities of daily life becomes a stressor, stroke patients who could not accept his condition would have a negative perception and inadequate coping, if it continues stroke patients who are unable to adapt can be a condition of distress, it will affect the healing process, Nurses are advised to provide support in the adaptation process by facilitating and directing a positive perception, constructive coping and doing treatment physical range of motion exercise regularly and facilitating family support for the patient.

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THE IMPACT OF USING NIGELLA SATIVA OIL ON PRESSURE SORES PATIENTS FOR RISK REDUCTION OF CONSCIOUSNESS

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ABSTRACT

Introduction: Treatment of pressure sores complications caused by consciousness patients is not only influenced by non-pharmacological and pharmacological treatment but also much needed in order to avoid pressure sores. From the field data obtained are still many patients who are at very high risk of pressure sores so given Nigella sativa oil (NSO). NSO is a non-pharmacological therapy can reduce the number of occurrence of pressure sores. Interest NSO study to determine the effect on the risk of pressure sores in consciousness patients. **Method:** The study design using a quasi-experimental approach non-randomized pretest-posttest control group divided control and treatment groups. This study was conducted in patients with loss of consciousness in the ICU hospitals Bangkalan. Number of samples 18 people with purposive technique sampling, measuring instruments using observation sheet with Braden scale. The treatment group was given enough basting NSO in hind limb for 3 days. Data were analyzed by univariate and bivariate Independent T- test. **Results:** The results showed the difference in the average score significant risk of pressure sores between the limb and the control group p value = 0.000 ($p < 0.05$). **Discussion:** There effect of nigella sativa oil on the risk of pressure sores in consciousness patients. Based on these results, it is suggested that nurses can use nigella sativa oil as an alternative to prevent pressure sores that can reduce the incidence of pressure sores.

Key words: *nigella sativa oil, pressure sore, unconsciousness patients*

INTRODUCTION

One of the patients who indicated admission to the ICU patients who are experiencing loss of consciousness. Loss of consciousness is a state where the patient is not conscious in the sense of not awake/ not awakened in their entirety so as not able to give a normal response to stimuli (Weinstock, 2013). There are six levels of consciousness are: confusion, disorientation, lethargy, somnolence, stupor and coma. Patients with loss of consciousness is not able to mobilize, which means the patient will be lying in bed (Nursalam, 2012). Patients who experience loss of consciousness should be treated intensively. The impact that occurs in patients with loss of consciousness one is immobilized. Patients who experience immobilized indirectly would lie in bed without being able to change position, it is at high risk for developing pressure sores (Nursalam, 2012).

According to Nursalam (2012), pressure sores is a localized tissue damage caused by the compression of the soft tissue over the bone, protruding and external pressure

in the long term. Compression network will cause interference with the blood supply to the depressed area. Meanwhile, according to Widodo (2007) explains that the prevalence of pressure sores in ASEAN ranges from 2.1 % to 31.3 %, the prevalence rate is still too low when compared with the incidence of pressure sores in Indonesia, which reached 33.3 % . From preliminary studies conducted in ICU Syarifah Ambami Rato Ebu hospitals data obtained in June, there are 3 the incidence of pressure sores, July 4 the incidence of pressure sores, and the month of August 6 the incidence of pressure sores.

Based on the statement of head room in the Intensive Care Unit (ICU) in 2014 pressure sores incidence rate of 0.1 % of the total patients as many as 648. This figure still too high for the target quality hospital standard stated that the incidence of pressure sores should be 0 % . Based on the preliminary study on Tuesday, 15 September until 14 October 2015 to ten patients in ICU Syarifah Ambami Rato Ebu Hospital Bangkalan using Braden Scale with a maximum score of 23, a low risk

> 20, the risk was 16- 20, high risk 11-15, found 1 patients had pressure sores, 5 patients have a high risk of pressure sores while 4 patients had pressure sores were. Based on the description above can be concluded that there is still a high risk of pressure sores in patients in ICU Syarifah Ambami Rato Ebu Hospital Bangkalan.

According Nursalam (2012) there are two main things that relate to the risk of pressure sores, the pressure factor and tissue tolerance. Factors which affect the duration and intensity of pressure over the prominent bone is immobilized, and decreased perception inactivity. While the factors that affect the tissue tolerance divided into two extrinsic and intrinsic factors. Patients who experience decreased consciousness has a high risk of pressure sores. among other extrinsic factors include pressure, friction and friction , moisture, other than that there are intrinsic factors include age, temperaturee and nutrition. These factors may cause the occurrence of pressure sores characterized by erythema or redness, skin edema , and tempratur in the area increased to hearty. If pressure sores happens it will make the state of the client gets worse, the patient also will be longer treated in hospital .

Pressure sores are the main problem for patients to be treated in hospital longer with the limitations of multiple activities and life threatening medical complications can occur as a result of the incidence of pressure sores during hospitalized. In addition, the pressure sores were not treated properly will result in long- term care into the hospital and increased cost. Therefore, nurses need to understand comprehensively about pressure sores in order to provide prevention and appropriate nursing interventions for patients at risk (Nursalam , 2012). Pressure sores can be a major complication of loss of consciousness. To prevent complications do passive ROM, but it can be given nigella sativa oil. From the above phenomenon researchers interested in studying whether the use of nigella sativa oil can cope with the risk of pressure sores .

METHOD

In this study, using a quasi experimental study design, this design seeks to reveal causal relationships by engaging with the control group in addition to the experimental group (Notoatmodjo, 2010). In a quasi- experimental design, the experimental

group and the control group was given no treatment. In both treatment groups beginning with the pre test and after the treatment was held re-measurement.

The independent variable in this research was the nigella sativa oil and the dependent variable is the risk of pressure sores. The population in this study were patients admitted to the ICU Syarifah Ambami Rato Ebu Hospital Bangkalan who suffered loss of consciousness as much as 43 respondents. Where respondents will be divided into two control groups were 9 respondents and the treatment group 9 respondents, in which the two groups will be measured against the risk of pressure sores using Braden scale before being given nigella sativa oil.

The inclusion criteria are the criteria by which research subjects may represent a sample that qualifies as a sample (Hidayat, 2008). Patients covers loss of consciousness in the ICU Syarifah Ambami Rato Ebu Hospital Bangkalan are new patients, patients without prior treatment of pressure sores. In this study nonprobability sampling technique used mainly by using purposive sampling technique. Place of research is in ICU Syarifah Ambami Rato Ebu hospitals Bangkalan held for 2 months starting in January and February 2016. The study was conducted over five days for the treatment group and 5 days for the control group.

In this study using the analysis as follows: to determine differences in the risk of pressure sores pre and post treatment group using the Wilcoxon test. To determine differences in the risk of pressure sores pre and post control group using Wilcoxon test. To know the effect of nigella sativa oil on the risk of pressure sores patients with loss of consciousness using the Mann -Whitney test. Statistical test in this study using $\alpha \leq 0.05$

RESULT

Table 1 Frequency distribution of respondents in patients in the ICU who received therapy nigella sativa oil (treatment group) in January 2016.

Respondents Code	Pre	Post
P1	10	12
P2	12	14
P3	11	10
P4	8	10
P5	9	11
P6	10	12

P7	9	14
P8	12	15
P9	9	12
Mean	10,00	12,22
$\alpha = 0,05$	$p = 0,003$	

Data Source : Data Acquisition On The Ground

After analysis of the data showed that 9 respondents were given treatment for nigella sativa oil treatment group found that the average value of the observation post pre 10.00 and 12.22 value. From table 4.4 minimum value of 8.00 and a maximum value pre 12.00, for a minimum value and a maximum value of 10.00 post post 15.00. From the results of different test that uses paired t-test didapatkan $p = 0.003$. So the significance is smaller than the degree of fault which has been established by researchers is 0.05 . So it can be concluded there is difference observed values are given pre and post therapy Nigella Sativa Oil.

Table 2 frequency distribution of respondents in patients in the ICU who do not get treatment nigella sativa oil (control group) in January , 2016.

Respondents Code	Pre	Post
P10	14	16
P11	11	7
P12	7	6
P13	10	7
P14	10	6
P15	11	7
P16	14	11
P17	14	10
P18	11	8
Mean	11,33	8,67
$\alpha = 0,05$	$p = 0,004$	

Data Source : Data Acquisition On The Ground

After analysis of the data showed that 9 respondents were not given treatment for nigella sativa oil (the control group) found that the average value of the results of observations pre test 8.67 and post test 11.33. From table minimum value of 7.00 and a value pre maximum value of 14.00, for a minimum value and a maximum value of 6.00 post post 16.00 . From the results of different test that uses paired t -test is obtained $p = 0.004$. So the significance is smaller than the degree of fault which has been established by

researchers is 0.05. It can be concluded no difference observed values pre and post therapy were not given nigella sativa oil.

Table 3 Distribution of comparison of observed risk of pressure sores in patients with reduced consciousness between the treatment group and the control group in the ICU Syarifah Ambami Rato Ebu Hospital Bangkalan in January .

Respondents	Difference Treatment	Difference Control
1	-2	-2
2	-2	4
3	1	1
4	-2	3
5	-2	4
6	-2	4
7	-5	3
8	-3	4
9	-3	3
Mean (rata-rata)	5,44	13,56
$\alpha = 0,05$	$p = 0,000$	

Data Source : Data Acquisition On The Ground

After analysis of data obtained from the difference between the 2 groups were given treatment for nigella sativa oil and were not given therapy nigella sativa oil found that the average value of observations risk of pressure sores in patients with loss of consciousness given nigella sativa oil value of 5.44 and were not given nigella sativa oil worth 13.56 and test results independent t -test statistical treatment group and the control group p is 0,000 so that its significance is smaller than the error rate ($0.000 < 0.05$) were determined researcher significance 0.05 (5 %). Therefore we can conclude there is no difference after therapy nigella sativa oil and that is not done giving nigella sativa oil.

Table 4 Distribution of frequency differences observed values risk of pressure sores in patients with reduced consciousness between the treatment group and the control group in the ICU Syarifah Ambami Rato Ebu Hospital Bangkalan month of January 2016.

Group	Change			Total Σ (%)
	Down Σ (%)	Permanen t Σ (%)	Up Σ (%)	
Treatment	1 (11,11)	0 (0)	8 (88,89)	9 (100)
Control	8	0 (0)	1	9

(88,89) (11,11) (100)

Data Source : Data Acquisition On The Ground

After analysis of data obtained that changes the value of the risk of respondents who have received therapy nigella sativa oil (treatment group) as being significant both because of the 9 respondents fraction decreased that is 1 respondent (11.11 %), respondents experiencing entirely and almost the increase is 8 respondents (88.89 %). While the value of the risk of pressure sores respondents who did not receive therapy nigella sativa oil (control group) classified as not good because of the 9 respondents almost entirely of respondents that are 8 respondents impaired observations risk of pressure sores (88.89 %) and a small percentage experience increase in the first respondents (11.11 %), it reinforces that therapy nigella sativa oil effective to raise the value of observation risk of pressure sores in patients with loss of consciousness.

DISCUSSION

Based on the results that there are differences in observed values of risk of pressure sores in patients with impairment of consciousness between pre and post therapy nigella sativa oil. Of the nine respondents almost entirely observed values increased risk of pressure sores by 7 respondents and a small decline observed values pressure sores risk that as many as 2 respondents.

In the opinion of researchers from the research that has been done that people with loss of consciousness observed values tend to decrease from day to day due to a decrease in sensory perception, moisture is getting worse, lack of mobility so that it can worsen the patient's condition and cause other complications one of them the risk of pressure sores. Therefore, researchers provide therapy nigella sativa oil as much as six times in a row within a period of 3 days. This provides good benefits to increase the value of the risk of pressure sores on patient observation loss of consciousness. That amount changes occurred in the treatment group because there is an increase in value is positive, especially on points of mobility, moisture.

In addition it provides therapy gradually nigella sativa oil daily for three consecutive days in the morning and the

afternoon was able to help a patient to mobilize passively ie right oblique, left oblique, and most importantly it provides nigella sativa oil may keep the moisture patients.

This study is also in line with what was described by Leir in Wasinto (2012) states that the black cumin oil has the benefit of protecting the skin against pressure and friction, provide optimal hydration and prevents cell anoxia. Essential fatty acids are effective in increasing the hydration and elasticity of the skin and effectively help prevent decubitus ulcers.

Factors affecting the decrease in pressure sores including sensory perception, moisture, mobility, activity, nutrition, friction and sheer, and age. The first is a decrease in sensory perception here researchers used the respondents decreased consciousness so indirectly patients who experienced loss of consciousness has certainly decreased perception. Patients who experience loss of consciousness usually experience sensory disorder that limits the ability to feel pain or discomfort in the extremities. This is in line with the theory put forward by Nursalam (2012) in which patients with decreased sensory perception will decrease the ability to feel the sensation of pain due to pressure on the bone protruding, and if this happens in a long duration the patient will be susceptible to pressure sores.

The second factor is the humidity, the results of research that has been done using nigella sativa oil to get the results that the pre intervention most patients experience skin is very moist and results of post intervention nigella sativa oil was found that nearly all respondents sometimes clammy skin. This suggests that patients with loss of consciousness which continues to lie in the absence of activity can lead to the degree of skin becomes moist, the results of research that has been conducted by researchers showed that there was an increase in scores on the variable humidity this shows that the therapy nigella sativa oil well to improve the degree of moisture patients , because the skin is constantly damp can increase the risk of pressure sores.

The third and fourth factor is the mobility and activity, the results of research conducted by the researchers can conclude that patients experiencing loss of consciousness entirely bed rest sleep. Activities which

plummeted almost inevitable physical activity can cause stress that may lead to the occurrence of pressure sores. This is consistent with the theory put forward by Maklebust in Wasisto (2014) the body tissues have different tolerance to pressure and ischemia, decubitus ulcers can occur for at least 2 days if the patient is experiencing a decrease in activity and can only fall asleep on the bed. Patients who have experienced significant decline in activity and can only lay in bed if not done mobilization will certainly exacerbate the risk of pressure sores.

This is according to research Sabandar (2008, in Suheri 2010) marks decubitus ulcers will appear within a period of 6 hours in a patient immobilization during the entire treatment. Factors that five is nutrition, the results of research conducted by the researchers found that the results of pre intervention nigella sativa oil for almost half of the respondents pattern of nutritional intake is inadequate, after being given nigella sativa oil intervention result most respondents increased to more adequately. According to the researchers improved nutrition that occurs in the respondents are also very important because if the good nutrition it can indirectly provide nutrients to the skin, giving nigella sativa oil also has the objective to provide nutrients from the outside, namely by applying black cumin oil contains vitamin, anti-histamine, anti-inflammatory and also good to suppress the risk of pressure sores.

Factors that six is friction and shift, from the pre and post intervention nigella sativa oil majority of respondents experienced problems. According to researchers of patients who experienced a loss of consciousness automatically require help full to move, patients who experience loss of consciousness often slumped down on the bed, where the patient is not often given rom passive and mobilization will occur skin friction with bed sheets apabil the patient slumped, with interventions given to patients, the researchers also provide meringkan rompasif with right and left. This is consistent with that put forward by Nursalam (2012) is a friction force as factors that lead to injury, this usually occurs when the patient is in bed and often degenerate.

Factors that affect the risk of pressure sores which in turn is age. Age in the intervention group mostly aged 20-60 years.

According to investigators the older the age, the more susceptible to pressure sores . According Nursalam (2012) Aging is easy to occur Pressure sores. Criteria of respondents at least age early adulthood aims to optimize the provision of interventions to be administered, as proposed by Alvello and Braden (2007) Widodo in Wistanto revealed that the risk of pressure sores begins when someone has entered early adulthood and are increasingly at risk of the occurrence of pressure sores on age above 80 years.

From the observation of pre-treatment at early adulthood found that the average value of 10.4 it means that in early adulthood have a very high risk for the occurrence pressure sores. After therapy given nigella sativa oil (post treatment).

Based on the results that there are differences in observed values of risk of pressure sores in patients with impairment of consciousness between pre and post are not given nigella sativa oil. Of the nine respondents almost completely impaired the risk of pressure sores.

In the opinion of researchers from the research that has been done that the risk of pressure sores on respondents tended to decrease it's all because of the decrease in sensory perception, moisture can not be controlled, activity, mobility is almost completely done, the nutrients consumed by the patient and also the consumption of external inadequate, friction and shift and also the age of the respondents who had entered early adulthood.

The first factor is the decrease in sensory perception, in this study the respondents put the patient loss of consciousness. If the patient is already experiencing penuruanan consciousness then automatically will also experience penureunan sensory perception, respondents who experienced a decrease in sensory perception would be easier struck pressure sores. The second factor is the humidity, the patient's loss of consciousness is not given therapy nigella sativa oil are subjected to constant moisture. It can be caused by skin moist almost constantly sweat, urine, and others.

The next factor that is activity and mobilization. From the research that has been conducted by researchers found the majority of respondents experienced a decline in scores on the variables of activity and mobility. The

patient's loss of consciousness tend to be unable to perform its activities can only be lying in bed, in the respondents control group patients tend not often given the mobilization of the patient is only able to make a little change in position of the extremities but not often or meaningful independently, this is what causes the risk of decubitus tends to increase.

This is in line with the one described by Nursalam (2012) mobility is the ability to change and control the position of the body, while activity is the ability to move. Patients who lie constantly in bed without being able to change the position of high risk of developing pressure sores.

The next factor that is nutrition. From the results of research conducted by the researchers found that a majority of patients experienced a decrease of nutrients it may be affected because patients are less able to digest nutrients provided resulting in retention, when nutrition is inadequate, it can cause pressure sores.

The next factor that is friction and shift. From the research that has been conducted by the researchers found that nearly all respondents decreased scores and need the help of moderate to maximal when moving, lifting fully without rubbing on the sheets is impossible, the body often slid off the bed, spasticity, contractures caused constant friction, this can lead to pressure sores occur. In accordance with Nursalam (2012) is a friction force as factors that lead to injury, this usually occurs when the patient is in bed and often degenerate.

All of these factors can increase the risk of pressure sores. So that in the control group who did not receive the intervention nigella sativa oil have little possibility to increase the value of the risk of pressure sores. Of the factors that have been outlined by Nursalam (2012) all of which can be measured by the Braden scale and the results of the control group pre average value of respondents was 10.33% and the value of post control group was 7.44%, this shows that in the control group occurred impairment observations risk of pressure sores.

In addition to these factors there is still the age factor that can increase the risk of pressure sores in patients with loss of consciousness. Where most aged over 60 years. According to researchers increasingly older age it will create greater risk of

developing pressure sores because the older a person will decrease skin elasticity, regeneration of new skin cells. Measurement values observed in the control group showed that there was no increase in value even tends to a decline in scores. It can be caused due to the withholding of therapy black cumin oil (nigella sativa oil) which can affect the skin moisture, nutrients to the skin. The control group did not receive specific information about the risk of pressure sores that do not know the patient's family should take precautions.

Based on the research that has been conducted by researchers no therapeutic effect of nigella sativa oil against the risk of pressure sores in patients with loss of consciousness in the ICU Syarifah Ambami Rato Ebu Hospital, Bangkalan. The results of the analysis of statistical tests independent t-test showed that significant 0,000 p is smaller than the degree of culpability ($0.000 < 0.05$).

The results showed that the respondents that given nigella sativa oil can improve scores observed in the treatment group. This is caused by the nature of nigella sativa oil can provide nutrients to the skin, keeping the skin moist, it is similar to the one described by Ariestya (2009) contains nigella sativa oil consists of four components of the active substance which contains Thymohydroquinone (THQ), Thymoquinone (TQ), ditymouinone (DTQ), thymol (TH). The fourth active substance which contains an assortment ie amino acids, proteins, carbohydrates, saponins and many other content. In addition to the chemical content and the general content of the fatty acid composition of nigella sativa oil also contains vitamins (A, B, B2, C), mineral salts, calcium, potassium, iron, zinc, magnesium, selenium, omega 3, omega 6. Besides nigella sativa oil is also known for sure to have anti-histamine, anti-inflammatory, (anti-inflammatory), anti-oxidants, and are adding a good immune system (Zulkifli, 2013).

In the study therapy nigella sativa oil 2 times a day within a period of 3 days in a row and made the observation before being given nigella sativa oil is on the first day of the meeting and after given nigella sativa oil in meetings to five, this is done to provide therapy optimally and really useful for respondents. Additionally when the researchers gave the intervention of nigella sativa oil

researchers also provide information to the patient's family to give stimulus like to invite to speak, chanting for patients who experience loss of consciousness can still hear when to communicate but cannot afford to respond to the stimulus. When the family got the information that should indeed they know that indirectly have a positive impact for patients. Researchers also provides pasive ROM automatically to the respondent at the time of therapy in responders. All things done by researchers of the respondents expected to have a positive impact. According to the theory Suheri in Wasinto (2014) skin care that is not planned and consistent can result in impaired skin integrity, the integrity of skin disorders may be caused by the pressure of time, skin irritation, immobilization, and affect the onset of decubitus sores. So if we plan a good skin care and consistent with the risk of pressure sores can be prevented.

There are differences in the risk of pressure sores in patients before and after the loss of consciousness is given black nigella sativa oil in the ICU Syarifah Ambami Rato Ebu Hospital, Bangkalan. There are differences in the risk of pressure sores in patients before and after the loss of consciousness without given nigella sativa oil in the ICU Syarifah Ambami Rato Ebu Hospital Bangkalan. No effect of nigella sativa oil on the risk of pressure sores in patients with loss of consciousness in the ICU Syarifah Ambami Rato Ebu Hospital Bangkalan. For hospital services to be able to provide nigella sativa oil in patients with decreased awareness to reduce the risk of pressure sores.

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THE CORRELATION OF DIABETES MELLITUS WITH INCIDENCE OF FLUOR ALBUS IN THE MIDDLE AGE WOMEN

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ABSTRACT

Introduction: Fluor albus common in middle-aged women as a result of various factors, one of them is diabetes mellitus. Hyperglycemia in diabetes mellitus resulted Lactobacillus can not leaven the whole of glycogen in the vaginal mucous, thereby enhancing the growth of fungi and bacteria. This study aimed to identify the correlation between the incidence of diabetes mellitus by middle age vaginal discharge in women. **Method:** This study was analytic correlational with cross sectional approach. The study was conducted on 43 women who live in rural areas, consisting of 25 suffering from diabetes mellitus and 18 healthy women, taken by fasting. The incidence of vaginal discharge (fluor albus) in women with diabetes mellitus was 21 compared to 7 healthy women. **Result:** Fisher's exact test showed no association between diabetes mellitus with events discharge ($\chi^2 = 9.158$, $p = 0.004$). **Discussion:** Hyperglycemia in women with diabetes mellitus can cause the mucous membranes of the vagina secrete glycogen. Lactobacillus the vagina is unable to leaven the whole of glycogen to lactic acid. This situation led to an increase in fungal growth and facilitates the occurrence of infections that will lead to an increase in the incidence of vaginal discharge. Hyperglycemia increases will worsen the condition of vaginal discharge, therefore it is important for women with diabetes mellitus to maintain normal blood glucose levels.

Key words: diabetes mellitus, vaginal discharge, woman

INTRODUCTION

Fluor albus is a problem which often occurs in women of all ages, especially in the aged of 45 years and over. Most women assumed that whiteness is a regular problem but there are some who consider the problem of vaginal discharge is very disturbing daily activities (Cunnigham, et al., 2005). Fluor albus which was not handled well and may cause infection in the vagina can be an early symptom of cancer servikas, which is the number one killer of women resulting in death (Mubarak & Chayatin, 2009). Fluor albus mostly happens caused by various factors one of which is the excessive blood glucose levels in people with diabetes (Mubarak & Chayatin, 2009).

Excessive blood glucose levels in patients with DM caused the mucous membrane of the vaginal wall will emit excessive glycogen causing lactobacillus not able to leaven all the glycogen to lactic acid. The situation caused the fungal growth and development as well as vaginal infections that cause vaginal discharge. Fluor albus also getting worst when the body resistance was decreased, therefore the body is unable to fight the bacteria of the vagina that will lead to the growth of fungi and bacteria that whiteness is getting worst (Clayton, 2008).

However, not all of patients with diabetes experience the vaginal discharge. It is necessary to identify how the relationship between the incidence of diabetes milletus with whiteness.

METHODS

This study was conducted in August 2015 in the Pagerwojo village, Perak Jombang. This research used analytic correlational with cross-sectional. The study was conducted on 43 women with an age range of 45 years to 59 years, divided into 25 women with DM and 18 healthy women. Data collection technique was used by simple random sampling technique. The determination of DM with fasting blood glucose checks and the recognition of respondents who was suffering the diabetes. The determination of whiteness use structured interview based on their symptoms and indicators of their whiteness. Data were analyzed using Fisher's exact test with significance level of 5% (0.05).

RESULT

Fluor albus occurred to 21 women out of 25 women with the case of DM (84%) and fluor albus women also occur in 7 of 18 healthy women (39%). Most healthy women with 11 women from 18 healthy women (61%)

did not experience the fluor albus. Fisher's Exact test results showed a significant association between female DM with events discharge, with $X^2 = 9.158$ and $p = 0.002$, and the correlation coefficient = 0.423. More results see the table below.

Table1. The correlation between the incidence of diabetes mellitus with vaginal discharge in women middle age.

	The fluor albus		total
	fluor albus	unfluor albus	
DM's women	21 (84%)	4 (16%)	25
Healthy women	7 (39%)	11 (61%)	18
total	28	15	43

$X^2 = 9,158$; $p = 0,002$ Correlation coefficient = 0,423.

DISCUSSION

The fluor albus (fluor *albus* / vaginal discharge leukore) the discharge from the vagina beside blood, may be secretions, transudation or exudates from organs or lesions of the genital tract. Fluor albus is not necessarily pathological. Fluor albus physiological includes only the excessive secretion and transudation, excluding any exudate (Mansjoer, et al, 2001).

The fluor albus can be caused by the change of normal flora which affect the degree of acidity (pH) of the vagina (Indarti, 2004). Changes in the normal flora as a trigger of fluor albus. It is caused by physiological factors, constitutional factors and irritation factor (Mubarak & Chayatin, 2009). Physiological factors such as stimulation during coitus, around the menarche, and around the time of ovulation cause vaginal discharge which is normal that the fluid is mucus to the contains many epithelium with few leukocytes. Constitution Factors are caused by fatigue, emotional stress, poor nutrition and diabetes. Factors irritation caused by the use of soap to wash the sex organs, irritation due to vaginal lubricant or fragrances or irritated by the pants

DM women with high blood glucose levels have a high risk of experiencing vaginal discharge. High blood glucose levels caused the vaginal wall mucous membrane secretes excessive glycogen. Glycogen is too high in the vaginal wall caused Lactobacillus incapable to ferment all of glycogen to lactic acid. These circumstances support the growth and development of the fungus that would cause vaginal discharge (Clayton, 2008). DM

vaginal discharge in women with high glucose levels will be compounded by a decrease of durability immune system causes the body is not being able to kill germs / bacteria or fungus that is growing, so the result will be worst of fluor albus. The higher levels of blood glucose, the higher also to occur fluor albus. Therefore it is important for women with diabetes maintain blood glucose levels approach the condition of the range of normal blood glucose levels.

CONCLUSION

There is a significant correlation between the incidences of diabetes mellitus by middle age vaginal discharge in women. It is recommended for women with diabetes to keep blood glucose levels within normal limits to reduce the incidence of vaginal discharge.

This study was conducted with a limited respondents. Retrieval of data for determining the presence of DM is based on fasting blood glucose levels and the recognition that he was suffering from diabetes mellitus patients, without checking the blood glucose levels 2 hours post prandial. Determination of whiteness is also did not laboratory examination, only based on an interview with unfounded symptoms and signs of vaginal discharge, so it is unknown whether the discharge is physiological or pathological

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LENGTH OF DIABETES, DIABETIC PERIPHERAL NEUROPATHY

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ABSTRACT

Introduction: Diabetic mellitus is a metabolic disease. Diabetic mellitus also a chronic disease and have a complications. One of the complication is diabetic peripheral neuropathy. 60-70% patient with diabetic mellitus also has diabetic peripheral neuropathy. Factors that contribute of diabetic peripheral neuropathy incident are length of diabetes, ages, and poor of glucose control. This study aims to know correlate between length of diabetes with diabetic peripheral neuropathy incident. **Method:** This study used cross sectional design with 79 respondents and recruited by simple random sampling method. Data were collected from patients with diabetic mellitus. Diabetic peripheral neuropathy was measured by diabetic neuropathy symptom (DNS). **Results:** Chi square test analysis showed no significant correlate between length of diabetes with diabetic peripheral neuropathy incident (p value > 0.05). **Discussion:** It can be inferred that length of diabetes is not only one risk factors that contributed diabetic peripheral neuropathy incident. Therefore, need more research to correlate between diabetic peripheral neuropathy incident with the other factors.

Key words: diabetic mellitus, diabetic peripheral neuropathy, length of diabetes

INTRODUCTION

Diabetes mellitus can be defined as a disorder of the body mechanism in turning glucose into energy that results in high blood glucose levels (hyperglycemia) and cause few symptoms (Day, 2001). Diabetes mellitus which is not well controlled can cause vascular complications. Vascular complications are divided into macrovascular (coronary heart disease, stroke) and microvascular (retinopathy, nephropathy, neuropathy) (Black & Hawk, 2009). Microvascular complications include damage to the eyes (retinopathy) which can lead to blindness, kidney damage (nephropathy), which ended in kidney failure, and damage to the nerves (neuropathy), which resulted in the disruption of the diabetic foot up to the possibility of amputation of the limbs (Ignatavicius & Workman, 2010).

The incidence of diabetic neuropathy occurs between 60% and 70% in patients with diabetes mellitus type I and type II in the presence of neurological complications (Lemone & Burke, 2008). Cohort study on 4400 patients in Belgium, found that 7.5% of respondents had neuropathy in the early diagnosis of DM. After 25 years, neuropathy increased to 45%. Incidence in the United Kingdom, the prevalence of diabetic neuropathy in a patient population at the

hospital were approximately 29% have diabetic peripheral neuropathy (Argoff et al., 2006).

Factors that associated with neuropathy, according to Black & Hawks (2009) includes vascular insufficiency, chronic increase of blood glucose and other metabolic factors. Other risk factors that can lead to diabetic neuropathy, according Katulanda., Et al (2012) include increasing age, duration of diabetes mellitus and poor blood sugar control. Preliminary studies that conducted at the General Hospital of Demak, gave data from 7 outpatients with DM, 4 (seven) of patients experienced symptoms of diabetic neuropathy such as numbness in the feet.

Research on the complications of diabetes mellitus were done but research on factors that associated with the incidence of diabetic peripheral neuropathy has not been widely discussed. The purpose of this study is to determine the relationship between duration of DM with diabetic peripheral neuropathy.

METHOD

This study was an observational study with cross sectional approach. A total of 79 respondents were used as a sample with a sampling technique in the form of simple random sampling. Criteria for inclusion of samples in this study were all patients with type 2 diabetes who seek treatment at our

patient of Demak General Hospital. The instrument used to evaluate diabetic peripheral neuropathy is diabetic neuropathy symptoms (DNS).

DNS instrument is an instrument used to assess the incidence of diabetic peripheral neuropathy. DNS total score is 4, if patients with DM had a score of 1 is included into diabetic peripheral neuropathy (Meijer, J.W.K., Bosma, E., Lefrandt, J.D., Links, T.P., Smith, A.J., Steward, R.E., 2002). In Indonesia, the DNS instruments have been tested on the sensitivity and specificity to rate symptoms of peripheral neuropathy in diabetic patients with diabetes mellitus with the result p value of <0.05 (Mardastuti, 2003). This study data analysis used chi square test with computer software applications.

RESULT

Table 1. Distribution of respondent according to gender at RSUD Demak, 2016 (n=79)

Variable-Gender	Total	Percentage (%)
Male	33	41.8
Female	46	59.2
Total	79	100

As illustrated on table 4.1 majority of respondent are female (59.2%)

Table 2. Distribution of respondent according to age and length of DM at RSUD Demak, 2016 (n=79)

Variable	Mean ± SD	Median	Min -	95 % CI Max	n
Age	53,16 ± 8,75	54	30 - 71	51,2 -	79
Length of DM	6,19 ± 3,8	6	1 - 16	5,3 - 7,0	79

As shown in table 4.2 according to the age mean of the respondent is 53 years old, the youngest age is 30 years old and the eldest is 71 years old. The length of DM mean of the respondent is 6 years old, longest of length of DM is 16 years old and the shortest length of DM is 1 years old.

Table 3 Distribution of respondents according to the incidence of diabetic peripheral neuropathy at RSUD Demak, 2016 (n=79)

Variable	Total	Percentage (%)
Yes	75	94,9
No	4	5,1
Total	79	100

Yes	75	94,9
No	4	5,1
Total	79	100

As illustrated in table 4.3, 75 respondents suffering of diabetic peripheral neuropathy. As shown in table 4.3 with Chi square test the result found that p value 0.55 (p value<0.05) so it can be concluded that there is no significant relationship between the length of DM and incidence of diabetic peripheral neuropathy.

Table 4. Analysis of correlation between length of DM with incidence of diabetic peripheral neuropathy at RSUD Demak, 2016 (n=79)

Variable	Incidence of diabetic peripheral neuropathy		p value
	Happened	Not Happened	
Length of DM			
1-6	2 (2,5%)	44 (55,7%)	0,55
7-16	2 (2,5%)	31 (39,2%)	
Total	4 (5,1%)	75 (94,9%)	

DISCUSSION

The results of data analysis showed that female was the most experienced on neuropathy. These results are consistent with relevant previous research which states that the potential risk factor for diabetic neuropathy is greater in women by 78% compared to male respondents 22% (Booya et al, 2005). Relevant research results on the effect of peripheral neuropathy, gender, and obesity on postural stability of patients with type 2 diabetes mellitus respondents stated that as many as 107 of the 151 respondents who experienced peripheral neuropathy in diabetic are women. Another study from Aaberg, L (2007) entitled "Gender differences in the onset of diabetic neuropathy" indicates that of the total 376 respondents who experienced peripheral neuropathy in diabetic there were 220 respondents (59%) are women, but the onset occurs peripheral neuropathy in diabetic are more a lot of men.

The average of long suffered from diabetes is 6 years old. There are 4 respondents who had experienced diabetic peripheral neuropathy after 1 year of DM. These results are consistent with other relevant research that states that diabetic peripheral neuropathy experienced by diabetic patients occurred since 3-5 years after a diagnosis of DM (Tefaye et al, 2005). The length of people experience DM in line with the DM complications, it is means

that the longer experienced DM, the higher the incidence of complications experienced by patients. According to Suzuki, et al (2001) stated that the duration of suffering from diabetes with hyperglycemia affect changes to the walls of blood vessels and blood pressure.

Blood vessels consist of endothelial cells that line the inside lumen of all blood vessels and serve as a connection between blood circulation and smooth muscle cells of blood vessels (Hayat, 2004). Besides acting as a physical barrier between blood and tissue, endothelial cells facilitated the various complex functions of cells and vascular smooth muscle cells in the blood compartment (Haller, 1997). Relevant results of previous studies stated that as a result of chronic hyperglycemic can cause endothelial malfunction (De Meyer, 1997). So the assumptions of researchers from the destruction of endothelial cells will lead to a decrease in the function of peripheral nerve cells.

According to Bryan & Nick (2007) that the length of time a person suffers from diabetes can aggravate the risk of complications of diabetes mellitus including the form of neuropathy and diabetic ulcers. Similarly, according to Loughlin and Artlett (2009) a prolonged hyperglycemia can result the glycosylation reaction on nonenzymatic Maillard reaction between the protein and the reactive Carbonyl and Dicarbonyl compounds. The degradation of protein glycosylation resulted in the formation of α -dikarbonyl, 3-deoxyglucosone (3DG), which would then form the advanced glycation end products (AGEs), and eventually lead to diabetic peripheral neuropathy.

The length of time diagnosed diabetes is also associated with a decrease in the function of pancreatic beta cells, causing complications that commonly occur in patients with disease duration 5-10 years (Smeltzer & Bare, 2010). This is consistent with the theory that a decrease in the function of pancreatic beta cells will have an impact on insulin production. Decreasing the amount of insulin in the blood would reduce glycolysis in cells. As a result, glucose is not absorbed by the cells will lead to increased accumulation of glucose in the blood vessels and make a hyperglycemic condition (Guyton, 2007).

The results of this study showed complications have occurred in the time

duration is relatively short after a diagnosis of DM. Assumptions researchers, the long-suffering DM submitted by respondents do not fully illustrate the long respondents had actual diabetes. That's because the new respondents know the experience of DM after complications occur and the health services. Another assumption due to the limited number of respondents and the research areas that involve only one hospital, then it is not able to describe the proportion of the majority of the sexes in patients with diabetic peripheral neuropathy. That caused no relationship between duration of DM with the incidence of diabetic peripheral neuropathy.

In this case, the role of nurse as an educator and counselor explain the individuals or families about the signs and symptoms of the DM. It is expected to the increase in knowledge of the individual or the family to the DM will also increase the behavior of individuals or families, to immediately conduct investigation into the health service after feeling signs and symptoms. The faster handling of DM is expected to help lower the risk of more severe complications.

CONCLUSION AND RECOMMENDATION

Conclusions from this research is there is no relationship between the duration of DM with the diabetic peripheral neuropathy (p value > 0.05). Most of the respondents suffered from diabetes mean that for 6 years with the female gender the most experienced DM.

The results of this study can be used as additional information about factors - factors that can lead to diabetic peripheral neuropathy so that the diabetic patient can minimize risk of complications from diabetes. There are still many weaknesses of this study are not yet doing leg detection of decreased sensation and observation of factors - other factors such as age and poor blood sugar control, so that in the future needs to do more research to see other risk factors and to examine the foot sensation in DM patients

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THE EFFECTIVENESS OF EFFICACY TRAINING TOWARD QUALITY OF LIFE PATIENT'S UNDERGO HEMODIALYSIS

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ABSTRACT

Introduction: The incidence of chronic kidney disease increases every year and can develop slowly. A common problem many patients undergoing hemodialysis were non-adherence of fluid restriction that can lead increasing the risk of cardiovascular and hypertension that affect quality of life. Cardiovascular disease is the leading cause mortality and morbidity in patients undergoing hemodialysis and can cause death by 50%. This study aims to determine the effectiveness of efficacy training to quality of life chronic kidney disease patient's undergo hemodialysis. **Method:** This study design is quasi-experimental with pretest-posttest with control group. The sample in the study was 30 hemodialysis patients were divided into treatment groups (conducted training efficacy) and the control group (performed routine monitoring). Sampling with purposive sampling. This research was conducted in the hemodialysis unit Sultan Agung Islamic Hospital Semarang. Patients in the treatment group performed a total of 12 technical training sessions efficacy during hemodialysis. Measuring the quality of life questionnaire World Health Measurements are also performed in the control group. **Result:** Mc Nemar test results there are differences in quality of life before and after the training efficacy in the treatment group (p value 0.008). Chi Square test results showed there are differences in quality of life treatment group and control group (p value 0,024). **Conclusions:** Efficacy training effective to improve the quality of life chronic kidney disease patient's who undergo hemodialysis

Key words: training efficacy, quality of life, hemodialysis

INTRODUCTION

Chronic kidney disease (CKD) is a process pathophysiological etiology varied, resulting in decreased kidney function irreversible and progressive where the ability of the body fails to maintain metabolism and fluid and electrolyte balance, causing uremia (retention of urea and trash more nitrogen in the blood) (Black, J.M., Hawks, 2009; Nursalam, 2006; Smeltzer, S.C., 2009; Sudoyo, 2006).

Chronic kidney disease is a chronic disease that increases the number of events evolved, slowly, hidden unnoticed for several years (Black, J.M., Hawks, 2009; LeMone P., Burke. K., 2008)(Horrigan, 2012; LeMone & Burke, 2008; Black & Hawk, 2014). CKD in the United States is one of the ten leading causes of death and more than 30% of the adult population is estimated to suffer from CKD (Mehrota R., Shah. A.P., 2012; Yahiro et al, 2012). In Indonesia based on survey data PGK number reached 30.7 million people and about 70 thousand people who require dialysis treatment and only 7,000 people who can

perform dialysis therapy (Pernefri, 2013; Department of Health, 2009).

Renal function replacement therapy is therapy in patients with chronic kidney disease stage 5 with a GFR less than 15 mL / min. In the replacement therapy may include hemodialysis, peritoneal dialysis and kidney transplantation. At the end stage renal disease renal replacement therapy is needed to prolong life (Barnet et al, 2007; Suwitra, 2006). Patients with chronic kidney disease, hemodialysis will prevent deaths. However hemodialysis does not heal or restore kidney disease. Patients will continue to have a number of problems and complications as well as various changes in form and function in the body system (Knap B, Ponikvar B.J, Ponikvar R, Bren F.A., 2005; Smeltzer, S.C., 2009).

A common problem experienced by many patients undergoing hemodialysis regimen is non-compliance with terapeutik (Baraz et al, 2010; Mistiaen, 2010). Noncompliance is found in all aspects but non-compliance with the restriction of fluid intake is the most difficult aspect for most patients (Mistiean.P., 2010). Lack of adherence to fluid

restriction can lead to excess fluid in chronic and increasing the risk of cardiovascular and hypertension (Barnett. T et al., 2007; Mistiean.P., 2010).

Cardiovascular disease is the leading cause mortality and morbidity in patients undergoing hemodialysis and can cause death by 50%. Research shows 33-50% of patients do not adhere to hemodialysis fluid restriction. It can destroy the effectiveness of therapy resulting in disease progression is unpredictable and will likely increase the occurrence of complications. Therefore, efforts to avoid this situation by increasing patient compliance in undergoing therapy. Some studies mentioned factors - factors that affect patient compliance as knowledge, social support and self-efficacy.

Self-efficacy is the belief someone will be successful in doing self-care in order to achieve the desired result(Bandura, A., 1977) (Lev & Owen, 1996, Bandura 1997 in Tsay 2003). In patients with chronic kidney disease efficacy done in a structured training to improve adherence to fluid intake. Based on research that the efficacy of training is effective in increasing adherence to fluid intake(Sulistyaningsih, 2012; Tsay.L.S., 2011). The other study states that the most dominant factor affecting the quality of life of patients with chronic kidney disease is hypertension (Nurchayati., 2012). Increased compliance is expected to lower the risk of cardiovascular disease that will ultimately affect the quality of life.

Quality of life is important to measure to know how to influence the disease to life (Perlman et al, 2005). WHO (2004) defines quality of life is the individual's perception of his position in life in the context of culture and value system in relation to goals, expectations, standards and concerns. Quality of life can be measured by monitoring the functional status and subjective states of patients. Assessment of quality of life includes physical, psychological, social relations, the level of dependence, environmental and spiritual.

Islamic Hospital Sultan Agung Semarang patients with chronic kidney disease who undergo hemodialysis as many as 55 people. Based on preliminary data were obtained 4 out of 6 patients have difficulty to restrict fluid intake, experiencing shortness of

breath and blood pressure fluctuate. Patients also experienced significant changes in their lives that lead to decreased productivity, fatigue, reliance on others. It sometimes makes the patient is not eager to live a life.

METHODS

This research is experimental, using quasi-experimental design with pretest-posttest design with control group. In this research, the initial test (pre-test) and final test (post-test). Test performed by measuring the quality of life using the WHOQoL.

The population in this study were all patients with chronic kidney disease who undergo hemodialysis at the Islamic Hospital Sultan Agung Semarang. Sampling in the study conducted by purposive sampling method. The number of samples is 30 respondents. Divided into 15 respondents as the treatment group and 15 respondents as the control group. Patients with early hemodialysis schedule as the control group and patients with hemodialysis schedule during the day as a treatment group. Inclusion criteria hemodialysis twice a week, at least 18 years of age, can eat and drink their own, are not impaired cognitive and psychological. Exclusion criteria decreased consciousness, experiencing complications intradialysis, rejecting respondent.

The treatment group was given training during hemodialysis efficacy. Efficacy Training consisted of 12 sessions, as scheduled hemodialysis. This training was around 30 minutes for each hemodialysis schedule. This training is done individually to each - each time hemodialysis patients. This training focuses on chronic kidney disease, pathophysiology, hemodialysis, treatment, complications, nutrition, fluid restriction, control thirst, management, stress. In this training in addition to be educated also conducted discussions, counseling. For the control group was given routine care during hemodialysis.

RESULT

The statistical test results showed p value 0,008. Thus, it can be explained that there are significant differences in the quality of life between in experimental group before and after treatment (table 1).

Table 1. Demographic data(gender, occupation, education)

Characteristic respondents	Treatment group		Control group	
	n	%	n	%
Gender				
Male	9	60%	6	40%
Female	6	40%	9	60%
Education				
Primary	9	60%	11	73,3%
Secondary	4	26,7%	4	26,7%
Tertiary	2	13,3%	0	0%
Occupation				
Work	8	53,3%	8	53,3%
Jobless	7	46,7%	7	46,7%

The statistical test results p value 0,024. Thus, it can be concluded that there are significant differences in the quality of life

between the experimental group and the control group (Table 2).

Table 2. Quality of life respondents in the treatment group and control group

Tingkat insomnia	Treatment group		Control group		p value
	n	%	n	%	
Pre test					
Good	4	26,7	12	80	
Less	11	73,3	3	20	0,024
Post test					
Good	12	20	5	66,7	
Less	3	80	10	33,3	

DISCUSSION

Self-efficacy is the belief someone will be successful in doing self-care in order to achieve the desired result (Lev & Owen, 1996, Bandura 1997 in Tsay 2003). The formation process is done through a process efficacy of cognitive, motivational, affective and selection throughout life. Cognitive function allows individuals to predict events - events a day - a day that will result in the future. Much of the motivation generated from cognitive processes. With a person's cognitive motivation to motivate themselves and guide them through the anticipation actions forethought. To achieve success takes confidence and optimism. Person's beliefs problem-solving skills play an important role. The success of the activation process efficacy allows one to create an environment beneficial (Sulistyaningsih, 2012).

In patients with chronic kidney disease who undergo hemodialysis common problems that many experienced is in noncompliance against terapeutik regimen. Noncompliance is found in all aspects but non-compliance with the restriction of fluid intake is the most

difficult aspect for most patients (Mistean.P., 2010). Lack of adherence to fluid restriction can lead to excess fluid in chronic and increasing the risk of cardiovascular and hypertension (Barnett. T et al., 2007; Mistean.P., 2010). Prevention and treatment of cardiovascular disease is important because 40% - 50% mortality of patients with chronic kidney disease caused by cardiovascular (Sudoyo, 2006). Prevention and treatment of cardiovascular disease include diabetes control, controlling hypertension, dislipidemia control, control of anemia, hyperphosphatemia control, treatment of excess fluid and electrolyte balance disorders (Sudoyo, 2006). Adherence to the treatment regimen and prevent or minimize complications is an important factor contributing to survive and quality of life (Barnett. T et al., 2007).

The results are consistent with research Tsay (2011) that self-efficacy training is effective to reduce the average weight between dialysis time. Other studies conducted by Sulistyaningsih (2012), namely that the self-efficacy training effectively improved its adherence to fluid intake in patients with

chronic kidney disease who undergo hemodialysis.

The results achieved in the treatment group showed improved quality of life. Training efficacy done by providing education about chronic kidney disease, pathophysiology, hemodialysis, treatment, complications, nutrition, fluid restriction, control thirst, stress management (Tsay.L.S., 2011). Through the education provided can form a cognitive function. Patients will know more about chronic kidney disease can lead to various problems and complications. Because kidney function declining, one of the effects that occur when there is excess fluid there will be accumulation of fluid in the body. The excess fluid can increase the risk of cardiovascular and hypertension (Barnett. T et al., 2007; Mistiean.P., 2010). After the patient's cognitive formed through education, the patient will be motivated to comply with restrictions on fluid intake. With cognitive motivation a person can motivate them sendiridan act of anticipation through the forward thinking. The hope patients will form his belief that he was able to do the restrictions on liquids despite facing obstacles and pitfalls (Sulistyaningsih, 2012).

Adherence to the treatment regimen and prevent or minimize complications is an important factor contributing to survive and quality of life (Barnett. T et al., 2007). Quality of life is an individual's perception of his position in life in the context of culture and value system in relation to goals, expectations, standards and concerns. Quality of life can be measured by monitoring the functional status and subjective states of patients. Assessment of quality of life includes physical, psychological, social relations, the level of dependence, environmental and spiritual (WHO, 2004). Through training the patient efficacy will form the belief that he was able to conduct fluid restriction. The restrictions on liquids will be able to minimize the risk of cardiovascular and hypertension. Will thus be able to improve the physical health of which can reduce the shortness of breath, increased tolerance to activity, reducing pain and discomfort, reduce dependence on medical care, improve mobility, daily activities - day and earning capacity. It is intended to improve psychological health, social relationships, the level of dependence, environmental and spiritual.

CONCLUSION

Training efficacy has not been widely applied in the hemodialysis unit. The ability of nurses need to be developed in order to increase knowledge and skills in providing education and counseling in patients with chronic kidney disease who undergo hemodialysis. The nurse holds a strategic role in providing nursing care to patients with chronic kidney disease who undergo hemodialysis. Hemodialysis nurses play a role in meeting the basic needs of patients, especially the need for fluid balance considering the impact may increase the risk of cardiovascular and hypertension. Compliance someone to restriction of fluid intake may fluctuate so that the nurses as one of the spearheads service health at the hospital can continue to remind the patient to continually adherence fluid intake according to the needs that are expected to improve the quality of life of patients with chronic kidney disease who undergo hemodialis.

Assessment of quality of life in this study conducted using questionnaires answered subjectively by patients. In the next research must be done by measuring the quality of life that can be subjectively and objectively assess the quality of life

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EFFECTIVENESS OF PROVIDING *VIRGIN COCONUT OIL* (VCO) TOWARDS PRURITUS REDUCTION: STUDY ON PATIENTS WITH CHRONIC KIDNEY DISEASES UNDERGOING HEMODIALYSIS

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ABSTRACT

Introduction: Pruritus is the most frequent problems faced by hemodialysis patients. One of pruritus cause on patients with chronic kidney diseases is xerosis or dry skin. The study aims to find the effectiveness of providing VCO towards pruritus decreasing on patients with chronic kidney diseases who are undergoing hemodialysis. **Methods:** It was a quantitative study “*Quasi Experimental non equivalent control group*” with intervention on providing VCO (*Virgin Coconut Oil*). Data collecting was carried out by 5-D questionnaire of pruritus scale and observation sheets of Visual Analog Scale (VAS). The number of respondents is 60 patients with *total sampling* technique. The data obtained is processed statistically by using *Wilcoxon* Test. **Result:** The statistical test result of *Wilcoxon* show that there is a significant difference between the change of pruritus scale after intervention on comparison group and treatment group with value $p = 0.000$ ($p \text{ value} < 0.05$). **Discussion:** VCO is effective in reducing pruritus on patients with chronic kidney diseases who are undergoing hemodialysis.

Key words: *vco, pruritus, hemodialysis patients*

INTRODUCTION

Patients who have chronic kidney disease every body system will be affected by the condition of uremic. Then, the patient will show signs and symptoms such as a decrease in body fat, water retention in the tissues, skin discoloration, itching, slowed movement, and the accumulation of substances that are no longer needed by the body that require haemodialysis blood as soon as possible. Haemodialysis is a process used to remove fluid and waste products from the body when the kidneys are not able to implement the process. Patients undergoing haemodialysis will experience a number of problems and complications (Smeltzer & Bare, 2002).

According to National Kidney Foundation (2013), 10% of the population worldwide is affected by chronic kidney disease (CKD), and millions die each year because they do not have access to affordable treatment (National Kidney Foundation, 2013). In Indonesia, the incidence of Chronic Kidney Disease approximately 40-60 cases a (Foundation, 2013) annually. The national prevalence of chronic renal failure patients (Indonesia, 2013) is at 0.2%. The provinces with the highest prevalence is in Central Sulawesi (0.5%) and there are seven

provinces with the lowest prevalence. And based on individual analysis unit shows that nationally, 0.2% of Indonesia's population suffer from chronic kidney disease. If the current of Indonesia's population of 252 124 458 504 248 people then there are souls who suffer from chronic renal failure ($0.2\% \times 252\ 124\ 458\ 504\ 248 = 504\ 248\ 252\ 124\ 458$ soul). A condition that is quite surprising (Ministry of Health, 2013). According to data from the Indonesian Renal Registry (2011), the number of patients with chronic kidney disease in Central Java in 2011 is about 51393 cases. The data obtained in dr. Adhyatma, MPH Hospital of Semarang, patients with chronic kidney disease who undergo haemodialysis was ranked fifth out of 10 major chronic diseases. Based on data from patient records in 2013 showed that patients with chronic kidney disease who undergo haemodialysis as much as in 1084 with a prevalence of 14.5%. (Medical Record Adhyatma Hospital, 2013).

One of the complications that often occur during haemodialysis is pruritus (itching). (Smeltzer & Bare, 2002). Treatment of pruritus can be done using a topical ointment such as capsaicin or trankolimus. Systemic treatments have been tried with naltrexone, receptor agonists, μ -opioid, and

nalfurafin, k-opioid receptor agonist. (Sagita, C., et al., 2007). Another alternative to solve the problem pruritus patients with chronic kidney disease who undergo hemodialysis is by using herbal ingredients from pure coconut oil or commonly called the VCO (Virgin Coconut Oil). VCO (virgin coconut oil) is a processed form of coconut meat. In some areas, VCO better known as virgin oil, sara(Agero, AL., and Verallo, 2004). Kuncoro& Maloedyn (2005) says that the rash and itching can be lost aftersmearedwith VCO.

METHODS

The design of this research study is "Quasi Experimental non-equivalent control group" with the intervention Giving VCO (Virgin Coconut Oil). This study was conducted to determine the decrease in pruritus in patients with chronic kidney disease who undergo haemodialysis before and after the intervention Giving VCO (Virgin Coconut Oil) in Chronic Kidney Disease patients undergoing hemodialysis and had complications pruritus.

VCO is given by way of rub evenly on the surface of the skin that is experiencing pruritus by topical 3x every 5 minutes. Giving VCO is done to reduce the effective pruritus performed 3-4 weeks, researchers took 3 weeks to study and carry out the provision of VCO in the treatment group within a week 3x, every Monday, Wednesday, and Friday. The comparison group is given 3x lotion within a week, on every Tuesday, Thursday, and Saturday. Measurement of pruritus scale, conducted a day before being given VCO and lotions were then performed a pre-test and a day after being given VCO and lotions do post-test in the experimental group. Data were tested using the Wilcoxon test (non-parametric statistics) with a significance level of $p < 0.05$.

RESULTS

Table 1. Results of the analysis of pruritus scale before and after the intervention in the experimental group at the Hospital dr. Adhyatma, MPH Semarang in 2013 (N = 60)

Treatment Group	Mean	Std deviation	Min-Max
Before intervention	2,80	0,407	2-3
After intervention	1,57	0,568	1-3

Table 1 shows that the scale pruritus treatment groups before intervention was 2.80 with a standard deviation of 0,407 and the biggest pruritus scale is 3 treatment groups after intervention was 1.57 with a standard deviation of 0,568 and the biggest pruritus scale is 3.

Table 2 Results of the analysis of pruritus scale before and after the intervention in the comparison group at the Hospital dr. Adhyatma, MPH Semarang in 2013 (N = 60)

Comparative group	Mean	Std. deviation	Min-Max
Before intervention	2,80	0,407	2-3
After intervention	2,70	0,535	1-3

Table 2 also shows that the scale pruritus comparison group before the action was 2.80 with a standard deviation of 0,407 and the biggest pruritus scale is 3. The average scale pruritus comparison group after the intervention was 2.70 with a standard deviation of 0.535 and the largest pruritus scale is 3.

Table 3 Analysis Differences pruritus change after intervention in the treatment group and the comparison group at the Hospital dr. Adhyatma MPH Semarang in 2013 (N = 60) RSUD dr. Adhyatma, MPH Semarang in 2013 (N=60)

The pruritus	Change of N	P Value
treatment group	60	0.000
control group		

Table 3 is the result of Wilcoxon that the value of significance (p-value) 0.000 < 0.05 means H_0 rejected or no difference between the control group to the treatment group after intervention

DISCUSSION

Pruritus was the most common problems experienced by peritoneal dialysis orhemodialysis patients and its prevalence is reported to be between 50-90% starting from the (Sagita, 2007)(Wardani, 2007)(Kuncoro, J., 2005a)local, general, light and heavy (Narita et al, 2006). One of the causes of pruritus in patients with chronic kidney disease is a skin xerosis or dry skin (Pardede, 2010). Xerosis

skin usually caused by retention of vitamin A (Narita, I., Iguchi, S., Omori, K., and Gejyo, 2006) due to reduced function of the kidney to excrete these substances. So vitamin A will accumulate in the subcutaneous tissue of the skin. Vitamins are too excessive will lead to atrophy of the sebaceous gland and sweat gland so that the skin becomes dry and itchy (Sherwood, 2001; Akhyani, et. Al, 2005).

Treatment of pruritus can be done by using topical ointments such as capsaicin or trakolimus Systemic treatments have been tried with naltrexone, receptor agonists, μ -opioid, and nalfurafin, k-opioid receptor agonist (Pardede, 2010). In addition, by using herbal ingredients from pure coconut oil or commonly called the VCO (Virgin Coconut Oil) (Setiaji in Kuncoro & Maloedyn, 2005).

Virgin coconut oil (VCO) is a processed product native to Indonesia that began widely used to im(Sherwood, 2001)prove public health. It is known that fatty acids (especially uric acid and oleic) in VCO, its nature is to soften the skin. In addition, the VCO effective and safe to use as a moisturizer to the skin so that it can improve skin hydration, and accelerate the healing of the skin (Agero and Verallo 2004). In addition, the VCO can eliminate red spots and itching (Kuncoro, J. & Maloedyn, 2005). Virgin Coconut Oil (VCO) containing medium chain fatty acids are easily digested and oxidized by the body to prevent the accumulation of toxins in the body. The main component of VCO is a saturated fatty acid and about 90% unsaturated fatty acids of about 10%. VCO saturated fatty acids is dominated by uric acid. VCO contains uric acid \pm 53% and about 7% caprylic acid. Both are medium chain fatty acids are commonly called Medium Chain Fatty Acids (MCFA). Meanwhile, according to Wardani (2007) VCO contains 92% saturated fat, 6% mono unsaturated fat and 2% poly unsaturated fats. Fatty acid content (especially uric acid and oleic) in VCO, nature softens the skin. In addition, the content of uric acid in coconut oil is antibacterial and antifungal properties that help your body fight infection.

When uric acid contained in the VCO are in the body, it is converted into monouric, a monoglyceride compound that exhibits antiviral, antimicrobial, antiprotozoal and antifungal. VCO will be absorbed into the skin and kills all viruses, bacteria and protozoa. Fatty acids in VCO is easily absorbed by the

body, not hoarded used as fat as long-chain fatty acids, thus reducing the itching that exist within the body. Therefore, VCO is effective and safe to use as a moisturizer to the skin so that it can improve skin hydration, and accelerate the healing of the skin (Agero and Verallo, 2004).

CONCLUSION AND RECOMMENDATION

The scale of pruritus experienced by patients with chronic kidney disease who undergo hemodialysis therapy in the treatment group and the comparison group before the intervention is given by the percentage scale of pruritus was 80.0%.

Scale pruritus experienced by patients with chronic kidney disease who undergo hemodialysis therapy in the treatment group after a given intervention into mild pruritus scale with a percentage of 50.0%. However, there is still experiencing moderate pruritus scale with a percentage of 3.3%.

There is a change of pruritus in the group of patients treated with smeared VCO and the comparison group of patients with lotion smeared when the emergence of pruritus. Evident from the p-value at the time before the intervention in the treatment group and the comparison obtained p value 1.000; and at the time after the intervention in the treatment group and the comparison was obtained p-value of 0.000.

Provision of VCO is more effective than the administration of lotion in patients with chronic kidney disease who undergo hemodialysis at Hospital dr. Adhyatma, MPH to reduce the severity of pruritus.

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DIABETES SELF MANAGEMENT EDUCATION (DSME) INCREASE KNOWLEDGE LEVEL PATIENT DIABETES MELLITUS TYPE 2 (Study in Puskesmas Bangkalan)

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ABSTRACT

Introduction: Treatment of Diabetes Mellitus Tipe 2 is not only affected by medical treatment, but also need high knowledge that useful for succes in self care of DM Tipe 2 patient. From data of field collected that lots of DM's patient who have minimum knowledge need to be given education program called DSME. Diabetes self management education (DSME) is an ongoing process that has been conducted to facilitate of knowledge, skills and abilities of patients with DM to perform self care. The purpose of this research was to identify the effect of DSME on level of knowledge of DM type 2. **Method:** The types of research used *Quasi-Experiment* Design. The number samples was 39 people for treatment group and 39 people for control group by simple random sampling method. The instruments of research that have been were used questionnaire and booklet. **Result:** The result level of significance of knowledge in *Mann-Whitney Test* was 0,000 ($p < \alpha$; $\alpha = 0,05$), so that H_0 rejected. **Discussion:** It means there was effect diabetes self management education on level of knowledge in diabetes mellitus type 2. In this research, it is suggested that nurses can use DSME as sources of information and a health promotion program to improve knowledge and self efficacy in patients with DM type 2.

Key words : DSME, level of knowledge

INTRODUCTION

Diabetes Mellitus (DM) is a disease characterized by hyperglycemia due to the body lacks insulin both in absolute and relative (Hasdianah, 2012). If the disease is left untreated acute metabolic complications may occur and long-term vascular complications, both microangiopathy or macroangiopathy. This happens due to lack of knowledge on the treatment of patients with Diabetes Mellitus. Such knowledge can be gained from education, counseling or to seek its own resources. It aims to increase the knowledge in tackling health problems. And thus will be able to accept his situation and actively participate in dealing with health issues, especially in preventing complications from Diabetes Mellitus.

Based on data from the International Diabetes Federation (IDF) in the year 2030 as many as 552 million people in the world will have diabetes. More than 50% of people with Diabetes Mellitus died at the age under 60 years old (productive age) (IDF, 2012).

From the data acquisition in Bangkalan city public health center visits number of diabetic patients in 2013 as many as 130 patients and 2014 as many as 363 patients.

Based on the results of preliminary studies conducted by researchers at the Health Center Bangkalan on 21-22 September 2015 by giving questionnaires to 10 patients with Diabetes Mellitus, Diabetes Mellitus showed that patients who are knowledgeable good one, being knowledgeable and less knowledgeable 3 6. Average knowledge they do not know is the etiology, the way the examination, complications and foot care in Diabetes Mellitus. From the above data it can be concluded that there are still many patients with Diabetes Mellitus who have less knowledge.

Diabetes Self-Management Education (DSME), which integrates the management of the five pillars of DM emphasize behavioral interventions independently (Norris et al., 2002). DSME using guidance, counseling and behavioral interventions to improve knowledge of diabetes and improve the skills of individuals and families in managing the disease DM (Jack et al., 2004). Health education approach with DSME method not only uses counseling methods, either directly or indirectly, but has evolved to encourage participation and cooperation of people with

diabetes and their families (Glasgow & Anderson, 1999). This method is required in diabetes since the traditional method that puts the patient at the passive role no longer sufficient to capture the complexity of the treatment and the nature of the disease that requires not only health professionals but also the active role of patients in care (Anderson & Funnel, 2005).

Research Pramesti (2014) mentions that after DSME about the level of knowledge, respondents became know how memangement DM disease properly..

METHODS

This research used experimental design (Quasi-experimental). In this study, there are two groups: 1) the experimental group was treated with the approach principle be educating DSME 2) a control group did not receive treatment. In both groups performed a pre-test and post test. Research carried on working area Bangkalan city health center in December 2015 and January 2016.

The population in this study were patients with type 2 diabetes mellitus in Puskesmas Kota Bangkalan. The sample size used in this study were 39 people in each treatment group and the control group. The independent variables in this study is the educational approach to the principle of Diabetes Self-Management Education (DSME). The dependent variable in this study is the level of knowledge. This study uses the instrument in the form of a questionnaire to determine the level of knowledge that is done for two weeks during 4 meetings. The first meeting was pre-test and subsequent intervention approach education with the principle of Diabetes Self-Management Education (DSME) up to four meetings and conducted post-test at the end of the meeting. Statistical analysis was obtained by computer devices using statistical test of Wilcoxon Signed Ranks Test with significance level of $p < 0.05$ and a statistical test Mann Whitney test with significance level of $p < 0.05$.

RESULT

The results showed there were changes in knowledge before and after the educational approach to the principle of DSME. Statistical test results using Wilcoxon Signed Rank Test can be seen in Table 1 and 2. The study also obtained results that there is a difference

between the treatment group knowledge which has been given educational approach to the principle of DSME and the control group were not given education the principle approach DSME. Statistical test results using the Mann Whitney U Test can be seen in tables below:

Table 1. The frequencies distribution of the level of knowledge among patients with Type 2 Diabetes Mellitus in Puskesmas Bangkalan (the control group)

Knowledge	Pre		Post	
	Σ	%	Σ	%
Less	19	48,72	18	46,15
Moderate	14	35,9	16	41,03
Good	6	15,38	5	12,82
Total	39	100	39	100
X	56,15		56,28	
$\alpha : 0,05$	$p : 0,942$			

Table 2. Level of knowledge among patients with Type 2 Diabetes Mellitus in Puskesmas Bangkalan (the treatment group).

Knowledge	Pre		Post	
	Σ	%	Σ	%
Less	22	56,41	5	12,82
Moderate	13	33,33	15	38,46
Good	4	10,26	19	48,72
Total	39	100	39	100
X	54,62		73,97	
$\alpha : 0,05$	$p : 0,000$			

Table 3. Level of knowledge in patients with Type 2 Diabetes Mellitus between the treatment and control groups in Puskesmas Bangkalan

Change	Treatment		Control	
	Σ	%	Σ	%
Down	1	2,56	5	12,82
Permanent	2	5,13	31	79,49
Up	36	92,31	3	7,69
Total	39		39	100
$\alpha : 0,05$	$p : 0,000$			

DISCUSSION

The results showed that based on the results that there are differences in knowledge levels in patients with Type 2 Diabetes Mellitus between pre and post given Diabetes Self Management Education as shown in Table 3.

In the opinion of researchers from the research that has been done that the level of knowledge of Diabetes Mellitus Type 2 largely due to lack of knowledge about the understanding of the disease Diabetes Mellitus so that it impacts the maintenance treat illness.

Therefore, researchers gave Diabetes Self Management Education 4 times in 2 weeks time. This provides good benefits in increasing knowledge in patients with diabetes mellitus type 2. Changes in knowledge occurred in the treatment group because of their interest in and awareness of respondents in DM care management right as one of the factors that can lower blood sugar. Education is given in stages by means of lectures, discussions, sharing of fellow sufferers were more involved respondents and conducted a review before continuing to the next discussion making it faster and easier to accept. Their booklet into the handle also influential that education does not only take place at the face to face but it can be done independently by the respondent at home.

This study is also consistent with the theory Funnel (2012) which states that the education provided through the Diabetes Self Management Education to facilitate and improve knowledge. It is also mentioned by Sidani & Fan (2009) states that the education provided through the Diabetes Self Management Education effective to increase knowledge, attitude, dan metabolic control to patient with Type 2 Diabetes Mellitus.

Factors affecting the level of knowledge is education. The level of education in the intervention group was almost half of secondary education, namely junior and senior high that there are 17 respondents (43.6%). According to the researchers the higher the education the increasing knowledge. Notoatmodjo (2007) said the level of education also determines a person's ability to understand the knowledge acquired, ie the higher the person's level of education the easier the person receiving the information. Criteria respondents minimal secondary education aims to optimize the reception of the information provided. Someone who has been through the secondary level are expected to have experienced the development of attitudes, knowledge, and skill base as the provision of life and can be used to cope with life in the community (National Development Planning Agency, 2009). Patients who have been through secondary education level indicates that the patient has to know basic skills taught in primary education such as reading, math, logic, good communication and writing skills. Patients who have been through secondary education level also showed an increasing

crystalized intelligence, so that the ability of patients are expected to be able to understand the material given in the provision of DSME. Crystalized intelligence gained from past experience. Crystalized intelligence will always be changing due to new information obtained will improve our knowledge (Roach, 2011).

Based on the results of research in getting that there is no difference in knowledge levels in patients with Type 2 Diabetes Mellitus between pre and post are not given Diabetes Self Management Education as shown in Table 4.7.

In the opinion of researchers from the research that has been done that the level of knowledge of Diabetes Mellitus Type 2 largely due to lack of knowledge about the understanding of the disease Diabetes Mellitus so that it impacts the maintenance treat illness. In this group there were no significant changes to the increase in knowledge may be possible because no additional education that DSME. So that in the control group who did not get the information DSME has little chance to be able to increase patient knowledge.

This is consistent with the theory Notoatmodjo (1998) which states that the means of sufficient information is one of the external factors that can affect a person's knowledge. The more senses that humans use to receive more information and clearer understanding or knowledge acquired yag.

As for the factors which will affect the lack of knowledge of which is the education factor. Where nearly half of the total respondents, ie 13 votes (33.33%) diabetic patient education is primary education, making them difficult to accept information because of poor ability to read and understand. According to researcher education in general affect the forms of thinking and action of respondents with respect to respondents' awareness of Diabetes Mellitus.

This is consistent with the theory Notoatmodjo (2011) which states that education greatly affects the person's capacity for thought. In general, the higher the education level, the better the level of knowledge, whereas the lower the level of education, the lower or less anyway knowledge.

Nursalam (2011) states that education is an activity or process of learning to develop or enhance certain capabilities so that the educational goals that can stand on its own.

The lower the level of education held the lower the ability to be owned by someone in addressing a problem. A Type 2 Diabetes Mellitus patients who have less education background or in the basic level, are unlikely to accept new developments, especially the support degree of health. This is because the educational level of basic education is to simply introduce new knowledge to someone without any reason and deliberation process will be a science. Respondents who have less education background will find it difficult to accept new iformasi due process of thinking that has been ingrained in him is only temporary because of the absence of sufficient reasoning process of the diabetic patient's own due-owned background.

Another factor is age. The age of the control group almost half of elderly end at 56 years old - 65 years there were 14 respondents (35.9%). The older a person leads to decreased function of the body including the brain function decline to think. This is according to the journal Heriansyah (2014) which states that the respondents were in the age of 56-65 years of age are entering a period where presenil age are starting to show a decrease in body function and prefer the peace of mind of health.

Based on the results that there is influence of the Diabetes Self Management Education knowledge levels in patients with Type 2 Diabetes Mellitus in Puskesmas Kota Bangkalan. The results of analysis of the Mann-Whitney Test was also obtained $p: 0,000$ So the significance is smaller than the degree of error ($0.000 < 0.05$) established researchers significance 5% (0.05).

It is seen that after a given DSME respondents experienced an increase compared respondents' knowledge before being given DSME. All of the respondents were in the knowledge of Good and Enough. According to Basuki (2009), health education is a process that is ongoing, delivered with excellent communication and precise aim to change the mindset of someone so that the person's motivation, which in turn will increase the knowledge and behavior change, the progress must consequential constantly observed especially by those who gave it. Knowledge is one of the internal factors that affect the formation of human behavior. So that public knowledge about the incidence of type 2 diabetes increases, the necessary knowledge

and good manners also discusses the risk factors of type 2 diabetes (Notoatmodjo, 2007).

Health education is also one factor of the amplifier to raise awareness and change the behavior of people through the provision of information. When someone gets the stimulus (stimulus), which contains information on DSME in diabetic patients subsequently received by the person's information, the information will be processed by the brain in such a way so that will increase knowledge, giving rise to a perception of good and good conduct in preventing the disease. Changes perngetahuan one can last long or not depends on the stimulus provided by the providers of health education about DSME. Once a person is given DSME program, one is aware in advance of the stimulus provided then someone will be interested in the stimulus and would weigh on whether or not the DSME program for him. After that someone will start try to do something as desired by the stimulus and the new person will behave in accordance with knowledge. This has led to increased knowledge of patients with Diabetes Mellitus. After Diabetes Mellitus patients have sufficient knowledge of the care would itself be fulfilled and can regulate the development and improvement of the care process against him. Factors that causes the desire memanagemen care of him so that blood sugar can be controlled.

The statement above in accordance with the role of health education for patients with DM. First is to increase knowledge, increase their awareness. Such knowledge will be the starting point of a change in attitude and lifestyle, which eventually became the goal of changing the knowledge of patients with Type 2 Diabetes Mellitus.

In a study conducted provision of health education as much as 4 times in 2 weeks and was measured respondents' knowledge by administering a questionnaire before being given DSME at the first meeting the first week and performed repeated measurements of knowledge by administering a questionnaire at week 4 after two meetings to be given DSME. This is done to provide a correct knowledge to be understood by the patient and the results obtained from the respondents' knowledge is getting better after being given DSME.

According to the theory of stimulus-organism-response states that behavior can be changed only if the stimulus (stimuli) were

given a really exceed the original stimulu. Stimulus may exceed the original stimulus means a given stimulus should be able to convince the organism. In this organism convince reinforcement factor plays an important role (Notoatmodjo, 2010).

CONCLUSION

There is a difference in the level of knowledge of patients with type 2 diabetes mellitus before and after given Diabetes Self-Management Education (DSME) in Puskesmas Kota Bangkalan.

There is no difference in the level of knowledge of patients with type 2 diabetes mellitus before and after without being given Diabetes Self-Management Education (DSME) in Puskesmas Kota Bangkalan.

There is an effect of Diabetes Self-Management Education (DSME) on the level of knowledge of patients with Type 2 Diabetes Mellitus in Puskesmas Kota Bangkalan.

Suggestion for education, This thesis is expected to add a reference about increasing knowledge of Diabetes Mellitus Type 2. In other hand, for respondent, this study can provide knowledge and can utilize existing methods without having to take medication pharmacological simply obey and keep the advice given researchers the respondents in particular, on the society in general to improve the knowledge of Type 2 Diabetes Mellitus.

For Health Center. This thesis is expected to provide scientific information about the Diabetes Self-Management Education (DSME) on the level of knowledge of patients with Type 2 diabetes in the field p1.

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THE DIFFERENCE EFFECTIVITY OF BEKAM THERAPY AND PROGRESSIVE MUSCLE RELAXATION EXERCISE IN BLOOD PRESSURE LEVELS AMONG PATIENTS SUFFERED FROM HYPERTENSION IN PUSKESMAS (PUBLIC HEALTH CENTER) KWANYAR BANGKALAN

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ABSTRACT

Introduction: Hypertension is a disease with the highest incidence in Kwanyar Public Health Center. Some complementary therapies can be used to lower blood pressure are bekam therapy and progressive muscle relaxation exercises. The purpose of this study was to analyze the difference effectivity of bekam therapy and progressive muscle relaxation exercises in blood pressure levels among patients suffered from hypertension. **Method:** This study used a quasi-experimental research design, where respondents were divided into two groups. The treatment group was given bekam therapy and control groups were given progressive muscle relaxation exercises. The population in this study was patients suffered from hypertension in Kwanyar Public Health Center who filled inclusion and exclusion criterias. Samples were taken using simple random sampling with total of respondents are 18. The independent variable was bekam therapy and progressive muscle relaxation exercises. While the dependent variable was systolic blood pressure. Instruments in this study were a sphygmomanometer and stethoscope. Data were analyzed using statistical paired t-test and independent t-test with a significance value $\alpha \leq 0,05$. **Result:** Paired t-test results showed that bekam therapy could lower systolic blood pressure ($p = 0.000$) and a group of progressive muscle relaxation exercise could lower systolic blood pressure too ($p = 0.002$). Independent t-test indicated significant value of $p = 0.011$. **Discussion:** It can be concluded that there was a difference in blood pressure in hypertensive patients given bekam therapy and progressive muscle relaxation exercises. Both of progressive muscle relaxation exercises and bekam therapy could lower blood pressure levels, but with a different mechanism. Progressive muscle relaxation exercises involve increasing the production of nitric acid, while bekam therapy involves increased of serotonin, histamine, bradykinin and SRS. It is expected to develop further research on other exercises, such as yoga pranayama, thai-chi, etc. And bekam therapy can be applied in the community or in the public health center for lowering blood pressure in hypertensive patients.

Key words: hypertension, bekam, progressive muscle relaxation exercise

BACKGROUND

Hypertension was a disorder of the circulatory system that often founded in middle-aged or older. The signs was increasing in systolic blood pressure over 150 mmHg and diastolic over 90 mmHg. But for 60-70 years old, systolic pressure of 150-155 mmHg is still considered normal (Wayan, 2013). According to the World Health Organization (WHO) was recorded in 2012 at least 839 million cases of hypertension, estimated to be 1.15 billion in 2025, or approximately 29% of the total population of the world, where the sufferer more women

(30%) than men (29%). Approximately 80% of hypertension occurred mainly in developing countries (Trisnawati, 2014).

Riskesdas in 2013 by the Research and Development Ministry of Health RI prevalence of hypertension in Indonesia amounted to 25.8% in those aged > 18 years old, most cases remain undiagnosed hypertension in the community. Based on the diagnosis of health workers, the highest prevalence found in North Sulawesi province. The lowest prevalence based diagnosis and measurement of health workers present in Papua province, which amounted to 16.8%. Meanwhile, east Java

province was included in the top of 15 highest numbers of hypertension in Indonesia, namely by 26.2%.

Based on data obtained from Kwanyar Public Health Center on 23 September 2015 obtained the data of patients with hypertension in 2012 as many as 1,703 people, in 2013 there were 1,869 people, while in 2014 there were 1737 people. From these data we can conclude that the high incidence of hypertension in Kwanyar Public Health Center Bangkalan.

The epidemiological studies showed that there are two factors that caused hypertension. First is the uncontrolled risk factors include age, heredity and gender. And controlled risk factors include obesity, smoking, salt intake, exercise habits, drinking alcohol and stress (Elsanti in BKTm, 2012).

Hypertension is a major risk factor of death from stroke and factors that aggravate infarct myocardial (heart attack). That condition is the most common disorders in blood pressure. Hypertension is an asymptomatic disorder that often occurs characterized by increased blood pressure persistently (Trisnawati, 2014).

Hypertension pathological conditions requiring treatment or therapy. Treatment of hypertension can be classified into pharmacological and nonpharmacological therapy. Grouping pharmacological therapy is used to control blood pressure in hypertensive patients is a thiazide diuretics, alpha-blockers, beta-blockers and alpha beta-blockers, ACE inhibitors (angiotensin enzyme), calcium antagonists, vasodilators, Diazoxide, nitro prusside, nitroglycerin, labetalol. The incidence rate of adverse events on the drug as well as the relatively expensive price, nonpharmacological treatment makes the right choice. Non pharmacology therapy is the treatment without using a drug dealer in the process of therapy, the approach nonfarmakologi that can reduce hypertension are the techniques of weight loss (obesity), not smoking and alcohol consumption, limit excessive salt intake, exercise regularly, reduce stress and limit the consumption of drugs - obtain (Kamaluddin, 2012) and body relaxation exercise. For example, with progressive muscle relaxation exercises, acupuncture, leech therapy, bekam and many other medical therapies (Jansen et al, 2014). However, in this study, the authors conducted a non-pharmacological approach to lower blood

pressure is to a complementary therapy Bekam and Progressive Muscle Relaxation Exercises.

Bekam is a method of treatment by removing blood from the body through the skin surface. Another name bekam is hijamah, canduk, canthuk, letterhead, (Widada, 2011:p. 3).

Bekam done by giving "destruction" surface of the skin and skin tissue that give effect to normalize blood pressure. The improvements in the mechanism microcirculation blood vessels so that the resulting effect on the muscle relaxation (Nilawati, Krisnatuti, Mahendra & Djing in S Jansen, D Karim & Misrawati, 2014). Damage accompanied by gross blood discharge will also be released some substances such as serotonin, histamine, bradykinin, slow reaction substance (SRS). This substance causes dilatation of capillaries and arterioles, and flare reaction in bekam areas. Capillary dilation can occur far from the place of bekam. This led to an improvement microcirculation blood vessel relaxation effect (relaxation) stiff muscles and the consequent general vasodilation lowers blood pressure on an even keel.

Progressive muscle relaxation technique is a deep muscle relaxation techniques that do not require imagination, persistence or suggestion (Horodes 2008 in Setyoadi and Kushariyadi, 2011). Relaxation is basically connected with the human neural system, which consists of the central nervous system and OTOM. According to (Johan in Murti et al, 2010) the relaxed state is able to stimulate the body to produce a molecule called nitric acid (NO). This molecule works on progressive muscle tone done regularly can trigger a heart pumping activity decreased and arteries are widening, so that a lot of fluid out of the circulation of the blood. This will reduce the workload of the heart for patients with hypertension have a faster heart rate to pump blood as a result of an increase in the blood (Ramadani & Petra in Jansen, Karim & Misrawati, 2014).

METHOD

This type of research was quasi-experimental pre-posttest control group design that reveals a causal relationship by engaging with the control group in addition to the experimental group. In the treatment group intervention bekam therapy, while the control group performed the progressive muscle

relaxation exercises. In both groups beginning with the pre-test and after the treatment is held back measurement (post-test) (Nursalam, 2008: p.87).

The population in this study were people who suffer from hypertension in the work area Kwanyar public health centers as many as 100 people in February - March 2016 and meet the inclusion and exclusion criteria. Samples come from populations that can be used as research subjects through sampling. In this study, the sample was people suffering from hypertension in Kwanyar Public Health Center. The formula of the samples using the formula Sudigdo in (Choiri, 2013) with $n = 9$, so the sample size in this study was 18. In this study, the variables can be divided into two groups, namely: the independent variable is bekam therapy and progressive muscle relaxation exercises and the dependent variable is the systolic blood pressure.

RESULT

Based on the results of research in the Kwanyar Public Health Center it was concluded that there are differences in systolic blood pressure in hypertensive patients between pre and post be giving progressive muscle training and bekam therapy is given as shown in the table below.

Table 1. Result of Paired t-test before and after giving bekam therapy and progressive muscle relaxation exercise.

Group	Asymp. Sig. (2-tailed)	Mean	Std. Deviation
Pre - post LROP	0.002	13,33	8,67
Pre- post Bekam	0.000	30	15

From the results of paired t test showed that in the Pre-post progressive muscle relaxation exercises and bekam therapy average blood pressure respectively 13,33 and 30.

On the results of different paired t-test, progressive muscle relaxation exercise group obtained $p: 0.002$ and bekam obtained $p: 0,000$. So the significance is smaller than the degree of fault assigned researchers is 5% (0.05). Therefore we can conclude there is no difference in blood pressure between the pre and post given progressive muscle relaxation exercises and bruise.

Table 2. Result of Independent t-test (difference effectivity between treatment and control group)

Group	Asymp. Sig. (2-tailed)
Tekanan darah post latihan relaksasi otot progresif dan post bekam	0.011

Based on the table was obtained p value of 0.011 So the significance is greater than the degree of error ($0.011 < 0.05$) established researchers is 5% (0.05). It can be concluded that there are differences in the effectiveness of bekam therapy and progressive muscle relaxation exercises to changes in blood pressure

DISCUSSION

In this study, there was a difference in the effectiveness of bekam therapy and progressive muscle relaxation exercise in lowering blood pressure. According to (Ramadani & Petra in Jansen, Karim & Misrawati, 2014) relaxation that arise when doing progressive muscle relaxation exercise is basically related to the human nervous system work, which consists of the central nervous system and OTOM. The relaxed state is able to stimulate the body to produce a molecule called nitric acid (NO). This molecule works on progressive muscle tone done regularly can trigger a heart pumping activity decreased and arteries are widening, so that a lot of fluid out of the circulation of the blood. This will reduce the workload of the heart for patients with hypertension have a faster heart rate to pump blood as a result of an increase in the blood (Djohan in Murti, et al, 2010).

But in theory, the bruise is more favored because it has a mechanism of "destruction" the surface of the skin and subcutaneous tissue that give effect to normalize blood pressure. The improvements in the mechanism of blood vessels microcirculation causing a relaxing effect on the muscles (Nilawati, Krisnatuti, Mahendra, and Djing, 2008). Damage accompanied by a discharge of blood will also be released some substances such as serotonin, histamine, bradiknin, slow reactio substance (SRS). This substance causes dilatation of capillaries and artiriol, and flare reaction in bekam areas. Capillary dilation can occur far from the place of bekam. This led to an improvement microcirculation blood vessels

that lead to the relaxing effect of muscles stiff and the consequent general vasodilation lowers blood pressure is stable (Jansen, 2014). So by doing this bekam therapy, can lower blood pressure significantly.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on research that has been done can be concluded that there are differences in the effectiveness of bekam therapy and progressive muscle relaxation exercises to decrease blood pressure in patients with hypertension in Kwanyar Public Health Center. Bekam therapy is more significant in this regard. Do 2 times a week.

Recommendation

This study is expected to be further developed on the management of other, for example pranayama yoga, thai-chi, etc. And bekam therapy can be applied in the community or in the clinic for lowering blood pressure in hypertensive patients.

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THE APPLICATION OF CLOSE SUCTION TO HELP INEFFECTIVENESS OF AIRWAY CLEARANCE IN PATIENTS WITH VENTILATOR IN THE INTENSIVE CARE UNIT

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ABSTRACT

Introduction: Endotracheal tube in patients with ventilator is a foreign thing in respiratory tract secretions that can increase the production of the airway and cause airway clearance ineffectiveness problems that require suction action. The close suction technique is used in patients who are using ETT type. Close suction system is one of technique suction that applied without opening the ventilator connector in patients with ventilator in Intensive Care Unit. The purpose of this case study is to evaluate breath sounds, RR, SpO₂ before and after implementation of technique close suction in patients with ventilator in the Intensive Care Unit of Dr Mohammad Soewandhie Hospital Surabaya. **Method:** Research method was a case study in patients with early pulmonary edema eclampsia who use a ventilator. The instrument used is the observation sheet. **Result:** The results of the case study showed before the close suction action Ronchi breath sounds in the right lung field left, RR 27 x / min, and SpO₂ 90%. After applying technique close suction action on the first day with the results of SpO₂ 95%, RR 22 x / min, still no sound Ronchi in both lung fields, day 2 with the results of SpO₂ 97%, RR 20 x / min, there was the sound of a smooth Ronchi left lung, day 3 with the results of the oxygen saturation of 100%, RR 18 x / min and vesicular breath sounds. **Discussion:** Based on these results it can be concluded that the provision of closed suction system technique is effective in addressing the problem of ineffectiveness airway clearance. However, in patients with pulmonary infection that uses a ventilator with thick secretions should be given nebulizer prior to close suction action.

Key words: *closed suction system, ineffective airway clearance, ventilator, intensive care unit*

INTRODUCTION

Intensive Care Unit is a ward with staff and specialized equipment to treat patients with the disease, trauma, or life-threatening complications. Mechanical ventilation is an important part in the intensive care unit. Patients with the use of invasive mechanical ventilation before intubation. Intubation is a technique perform laryngoscopy and insert the endotracheal tube (ETT) through the mouth or nose. ETT is a foreign body in the airway can increase mucous secretion in patients. Mucous secretion is likely to increase due to the use of this equipment causes a cough reflex suppressed as well as the closure of the glottis is inhibited. The secretions tend to be more viscous due to the effects of warming and humidification of upper respiratory tract covered by ETT. This often creates problems ineffective airway clearance. Therefore, decreasing the body's mechanisms in the face of foreign object suction action is needed to

prevent aspiration of secretions into the lungs (Smeltzer, 2002).

Hospital medical records of Dr. Mohammad Soewandhie from January to March found the number of patients admitted to the ICU as many as 95 patients and there were 20 patients on a ventilator. Of the 20 patients using ventilators 90% experiencing crowded, no breath sounds Ronchi, RR increased, and SpO₂ decline after 2-3 hours post intubation. This resulted in impaired airway patency and if continued resulting in plugging the ETT that inhibit oxygenation to occur hypoxemia. Data obtained during the last 3 months of 8 patients with ventilators that use closed suction system and 12 patients using open-suction system. Two of these patients experienced a number of plugging on the third day after intubation, the patient's anxiety, spasms, increased RR and SpO₂ drops to 80%. From a preliminary survey conducted closed suction system is more often used in patients

with ventilator use high PEEP (more than 5), due to close suction performed without opening the ventilator tubing so it does not interfere with the process of oxygenation given ventilator.

Suction mucus procedure performed by inserting a hose suction catheter through the nose, mouth, and endotracheal tube. According Yudhiana 2010 in his study also reported that there was an effect on the effectiveness of suction action in cleaning the airway. Nevertheless endotracheal suctioning can cause adverse effects such as heart rhythm disorders, hypoxemia due to interruptions ventilator usage and decreased intrathoracic pressure. Another effect is also detrimental microbial contamination in the airway and development Associated Ventilator Pneumonia (VAP) if done in a way that is not true. To reduce the risk of complications due to the suction action is then necessary to apply suction effective technique to maintain the effectiveness of airway clearance with minimal complications. Technique suction is used there are two types: Closed Suction System (CSS) and Open Suction System (OSS). Open suction system in the implementation of which requires two nurses, disposable suction catheters / disposable, and requires detachment from the patient's ventilator (Masry, 2005). Closed suction system is used to prevent outside air contamination, contamination of personnel and patients, preventing a decrease in oxygen saturation during and after the suction, maintain positive pressure ventilation pressure or PEEP, especially patients who are sensitive when it separated from the ventilator as patients who require high PEEP. CSS is installed on the ventilator tubing fitted with a valve as its entrance suction catheter. A valve is opened when performing lenders and closed suction when suction is completed. Suction catheter is protected plastic material in order to keep sterile and suction connector is replaced every 24 hours. Sucking secret done by withdrawing the catheter CSS in a circle in a position to suck without opening the ventilator tubing so the oxygenation and pressure given ventilator remains constant. Suction catheter flushing process is done without removing the ventilator tubing. Therefore, technique closes suction need to be proved in overcoming the problem of ineffectiveness airway clearance in patients with ventilator.

METHOD

In this study used a case study technique close suction to overcome the problem of the ineffectiveness of the clearance of the airway in patients with ventilator in the ICU Hospital Dr Mohammad Soewandhie Surabaya which is research by investigating intensively about individuals, and or social unit that is done in depth with find all the important variables on the development of individual or social unit studied, in this study made possible the discovery of things that are unexpected.

RESULTS

Based on the chart 1, day 1 showed before and after close suction breath sounds there are Ronchi in the lung fields right and left, on the second day at 08.00 until 20.00 hours before and after close suction breath sounds Ronchi in the lung fields right and left, starting at 23:00 before and after close suction ronchi breath sounds in the left lung field alone. On the third day of 02.00 and 05.00 before and after close suction Ronchi breath sounds in the left lung field, at 08.00 prior to close suction Ronchi breath sounds in the left lung field and after close suction showed vesicular breath sounds. 11.00 until 12.00 before and after close suction vesicular breath sounds.

Chart 1 the results of the evaluation of breathe sounds before and after applied closed suction technique in patients with ventilator in the ICU Hospital Dr. Mohammad Soewandhie Surabaya

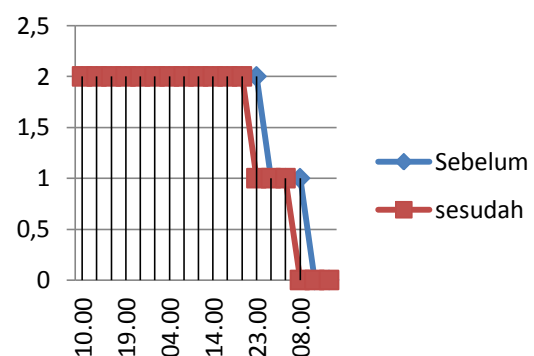
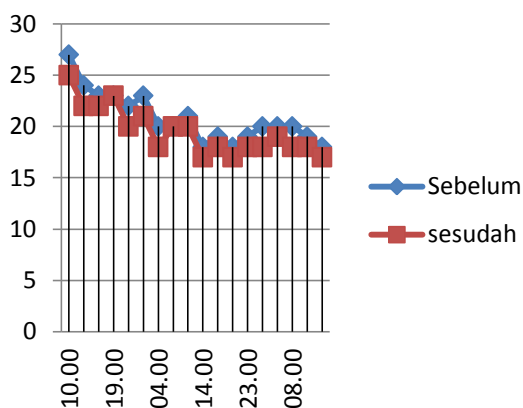
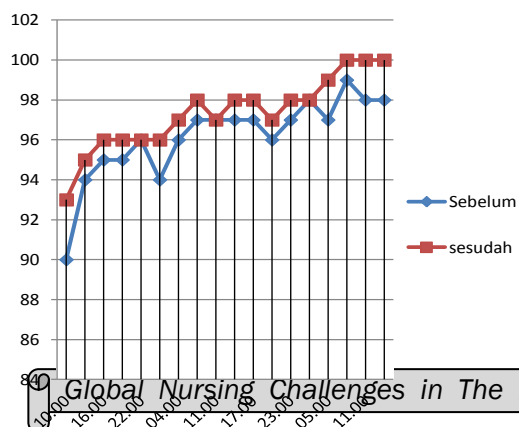


Chart 2 the evaluation results respiration rate before and after implementation of technique close suction in patients with ventilator in the ICU Hospital Dr. Mohammad Soewandhie Surabaya



Based on chart 2 days to 1 before the close suction highest RR 27 x/min and the lowest RR 22 x/min. After the application of suction, the respiratory rate was highest close to 25 x / min and the lowest RR 20 x / min. On the second day before the close of suction, the respiratory rate was highest RR 23 x / min and the lowest 18 x / min. After the action close suction was highest RR 21 x / min and the lowest 17 x / min. The third day before the close of suction obtained the highest RR 20 x / min and the lowest 19 x / min. After close suction highest RR 19 x / min and the lowest 18 x / min. Based on the chart 3, the implementation of closed suction lowest SpO2 90% and the highest 96%, after the application of suction close lowest SpO2 93% and the highest 96%. On the second day prior to close suction lowest SpO2 94% and the highest 97%, after the application of the highest SpO2 suction close 98% and the lowest 96%. On the third day before the application closed suction lowest SpO2 97% and the highest 99%, after the application of the highest SpO2 suction close 100% and the lowest 98%.

Chart 3 the results of the evaluation of SpO2 before and after application of techniques close suction in patients with ventilator in the ICU Hospital Dr. Mohammad Soewardhie Surabaya



DISCUSSION

Results on the first day were obtained before the implementation of closed suction lowest SpO2 90% and the highest 96%, after the application of suction close lowest SpO2 93% and the highest 96%. Pulmonary edema non-cardiogenic arise mainly caused by damage to the capillary walls which can disrupt the permeability of endothelial pulmonary capillaries, causing the entry of fluid and protein into the alveoli which will result in spending secret dilute bubbly and pink frothy if already advanced (Hudak & Gallo, 2010). because of the early complications of pulmonary edema in cases Ny.SF which interfere with the process of diffusion and O2 transport to tissues due to fluid in the alveoli that SpO2 has increased slowly over the reduction of pulmonary edema with the use of higher PEEP is PEEP 8. Since one of the factors that influence SpO2 their secret / fluid in the respiratory tract.

On the second day prior to close suction lowest SpO2 94% and the highest 97%, after the application of the highest SpO2 suction close 98% and the lowest 96%. Hiperoksigenasi can be done using manual resuscitation bag or through a ventilator and is done by increasing the flow of oxygen to 100% before imbibing and when the interval between each inhalation of secretions (Kozier & Erb, 2002). it is supported by excess tehnic close suction is performed without opening the ventilator tubing, giving preoxygenation done using a ventilator to provide an extra 100% oxygen for 3-5 times the inspiration without opening the ventilator connectors, oxygenation remained ongoing at the time of suction, and given PEEP remains constant so that alveoli do not collapse, especially in cases of pulmonary edema are very vulnerable decreased SpO2 especially at the time of suction mucus.

On the third day before the application closed suction lowest SpO2 97% and the highest 99%, after the application of the highest SpO2 suction close 100% and the lowest 98%. The test results obtained statistically significant difference in SpO2 values before and after intervention with closed endotracheal suction, the mean oxygen saturation values before suction 91.14% and the average value of SpO2 after the close action suction 92.14% (Sumarna, 2008). Day three in this case study SpO2 value increased to 100% after close suction action because the

patient is more cooperative and supported the use of appropriate suction cannula from the first day (size 12 Fr) at the close of suction. This is in line with research Muhamat Nofiyanto that size larger suction cannula (14Fr) can reduce levels of oxygen saturation more than the smaller size (12Fr). In the case of pulmonary edema when using open-suction tehnic will result in decreased SpO₂ fast and takes a long time to return to normal due to the pressure changes when the alveoli open ventilator connector. During this time held in the ICU Hospital Dr. Mohammad Soewandhie tehnic close suction is applied to patients who use high PEEP with secret diluted as in the case of pulmonary edema, the grounds based on observation when applied to patients with secretions tend purulent risk of plugging greater because the twist catheter close suction when suction is limited , Tehnic close suction on thick secretions will be effective if it is supported by adequate humidikasi and nebulized before suction.

CONCLUSION AND RECOMMENDATION

The results of the evaluation of the application of the suction technique close to the sound of breath on the third day vesicular sound obtained in patients with ventilator in the ICU Hospital Dr Mohammad Soewandhie Surabaya. The results of the evaluation of the application of suction tehnic close to the respiration rate on the third day come RR within normal limits 18 x / min in patients with ventilator in the ICU Hospital Dr Mohammad Soewandhie Surabaya. The results of the evaluation of the application of suction to the SpO₂ tehnic close on the third day SpO₂ obtained in the normal range of 100% in patients with ventilator in the ICU Hospital Dr Mohammad Soewandhie Surabaya.

Expected to be considered for budgetary expenditures consumables tool in the Intensive Care Unit. Improve the skills of ICU nurses in nursing action according to the standard of nursing especially ETT suction action with various suction tehnic accordance with the development of health technology.

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SELF-MANAGEMENT PROGRAMS IN HYPERTENSIVE PATIENTS: A LITERATURE REVIEW

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ABSTRACT

Introduction: The main cause of cardiovascular diseases that the largest cause of death in the world is hypertension. Nowadays, hypertension is not only occur in elderly, but also occur in adult. Therefore, self-management in hypertensive patients is very important to control the blood pressure and prevent complications. The purpose of this paper is to identify self-management programs in hypertensive patients. **Method:** A narrative review of literature was performed to obtain studies that assessed self-management programs. Studies were selected by searching Ebscohost, Proquest and ScienceDirect from 2010 to 2015 for RCTs research design, with the keywords are self-management, self-care, hypertension, hypertensive, dan high blood pressure. **Results:** Five articles involving 1,486 hypertensive patients discussed about education programs and home blood pressure monitoring (HBPM) by visit directly and HINTS by phone or internet. These programs were applied to outpatients within 8 weeks until 3 years. All studies have showed a significant result to reduce and control the blood pressure. **Discussion:** The conclusion of these studies is that education programs by visit directly or HINTS are effective to reducing the blood pressure patients. These programs could be applied by nurses to increase self-behaviour, self-efficacy, self-monitoring, and self-titration treatment in hypertensive patients. However, the most effective program (visit directly or HINTS) for self-management is still remain unknown. It is therefore needs further to explore the best educational program strategy for self-management in hypertensive patients with various aspects (ability and psychology patients, family support, and cost-effectiveness), especially in Indonesia.

Key words: *high blood pressure, hypertension, self-care, self-management*

THE EFFECT OF TEAMS GAME TOURNAMENT TO BEHAVIOUR PREVENTION OF ACUTE RESPIRATORY INFECTIONS AMONG SCHOOL AGE CHILDREN

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ABSTRACT

Introduction: Acute respiratory infections was one of infectious disease that remains a major problem in health, especially in Indonesia. ARIs can attack various ages, especially children. This happens because health education method to teach children about that has not been developed. TGT is one as an effort to solve this problem. The aim of this study was to analyze the effect of TGT to change behaviour in preventing acute respiratory infections among school age. **Method:** This study was a pre-experiment using pretest-posttest one group design. Sample was school age children at fifth class of SDN Mojo 3 Surabaya. 43 respondents were involved according to cluster random sampling. TGT method was independent variable while knowledge, attitude, and action were dependent variables. Data were collected by using questionnaire and observation sheet. Data then analyzed by using Wilcoxon Signed Rank Test with level of significance $p < 0.05$. **Results:** Result had showed that TGT method had effect on knowledge ($p = 0.000$) and action ($p = 0.000$) but not on attitude ($p = 0.127$). **Discussion:** It can be concluded that TGT method about ARIs prevention in school can improve the level of knowledge and action in ARIs prevention, but not the attitude. There might be other factors that influenced the attitude that were not investigated in this study. TGT is recommended to implement health promotion for school age about ARIs prevention. It can mix with other method to improve attitude of ARIs prevention behaviour.

Key words: *teams game tournament (tgt), acute respiratory infections (aris), school age, knowledge, attitude, and action*

INTRODUCTION

Infectious disease still becomes major health problems in Indonesia. Based on Ministry of Health's report on 2014, ARIs were one of infectious disease which contributed to an increase in visits public health centre (40-60%) and hospital (15-3%). ARIs can infect various ages, school age children are still at risk for the disease because a lack of personal hygiene and unable to maintain a healthy diet. Preventive and promotive efforts must be conducted. TGT can be used as one of effective health education methods which suitable with school age children's learning style. But, the effect of TGT on preventive behaviour of acute respiratory infections in school age children still can't be explained.

WHO (2013) also states the incidence of ARI in developing countries with child mortality rates above 40 per 1,000 live births is 15-20%. Based on Ministry of Health Republic of Indonesia (2013), the incidence of ARIs in Indonesia of infant (26%), toddler-preschooler

(49%), and school age children (25%). The prevalence of ARIs in East Java was number three in Indonesia, after West Java and Central Java. Surabaya City Health Department stated that the incidence of ARIs in Surabaya ranked first out of ten diseases from August until December 2014. At Puskesmas (public health center) Mojo on 2012, ARIs were infected 9.960 peoples (BPS Surabaya, 2013).

Based on interview with head of school, it can be seen that SDN Mojo 3 still didn't apply preventive behavior to prevent the transmission of ARIs. Although students at SDN Mojo 3 often infected by mild ARIs, but if it's left alone, it can affect student's concentration in learning and has the potential to become severe ARIs. Research result from Dini (2011) and Martha (2014) also states that health education about ARIs need to be improved both in quality and quantity, so peoples have good behavior in preventing ARIs transmission. There has never been a health education efforts made by health workers to the school-age children in terms of ARIs prevention

at Kelurahan Mojo. TGT method is a new learning method that uses the combination of three main topics in learning, includes lectures, work on a team, and games between teams. TGT method will increase students' interaction actively, make them more motivated to learn, and create a fun learning (Mahony, 2006). This method has been used in previous research to facilitate teaching learning at school, but never been used to educate children about ARIs at school.

Roger (1995) has stated that health education was one of innovation which can affect people's behavior through knowledge, persuasion, decision, implementation, and confirmation. That process will affect student's cognitive, attitude, and psychomotor. Once an innovation is adopted by users, the next expected process is the diffusion itself. Diffusion is the process by which innovations spread to individuals or groups in a particular social system. The aim of this study was to analyze the effect of TGT to change behaviour in preventing acute respiratory infections among school age children.

METHOD

This was a pre experiment research with one group pre-post test design. Population were 5th grade students at SDN Mojo 3 Surabaya (210 students). Sample was students at 5th grade class A and D, taken by using cluster random sampling, 43 students were involved. TGT method was independent variable while knowledge, attitude, and action were dependent variables. Data were collected by using questionnaires (for knowledge and attitude about preventing ARIs transmission) and observation sheet (for children's act about hand washing and

cough management). Data collected along one week. Data were then analyzed by using Wilcoxon Signed Rank Test with level of significance $p < 0.05$.

RESULTS

Table 1 shows that there were 14 respondents whose knowledge increased after being given treatment. There are 6 respondents whose knowledge does not change and no respondents who experienced a decrease in knowledge. Results of statistical test by Wilcoxon Signed Rank Test shows the results $p = 0.000$ means that there is the influence of health education methods tournament game teams to change the students' knowledge in the prevention of ARIs in school age children.

Table 2 describes that after a given health education almost entirely positive attitude is 31 students. There were no respondents who experienced decrease in attitude amounted to 18 students. Respondents who have increased the attitude amounted to 25 students. Results of statistical test by Wilcoxon Signed Rank Test shows the results $p = 0.127$ means that the method TGT did not affect the change in attitudes of students in the prevention of ARIs in children of school age, but still plays a role in the increase in the attitude of a minority of respondents.

It shows table 3 that overall, respondents' behavior changed after health education method tournament game teams. Results of statistical test by Wilcoxon Signed Rank Test shows the results $p = 0.000$ means that there is the influence of health education with the methods TGT against changes in student action in the prevention of ARIs in school age children.

Table 1. The distribution of students' knowledge about the prevention of ARIs before and after health education with the methods TGT in SDN Mojo 3 Surabaya, on 4-6 May 2015.

No	Knowledge	Pre test		Post test	
		f	%	f	%
1	Poor	6	13,9	0	0
2	Average	12	27,9	10	23,3
3	Good	25	58,1	33	76,7
	Total	43	100	43	100
	Mean		2,44		1,23
	Standard Deviation		0,734		0,427
				Uji Wilcoxon Signed Rank Test	
				p = 0,000	

Table 2 Distribution of student attitudes about the prevention of ARIs before and after health education with the methods TGT in SDN Mojo 3 Surabaya, on 4-6 May 2015.

No	Attitude	Pre test	Post test
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		f	%	f	%
1	Positive	24	55,8	31	72,1
2	Negative	19	44,2	12	27,9
	Total	43	100	43	100
	<i>Mean</i>		25,72		31,40
	Standard Deviation		3,362		3,513
<i>Uji Wilcoxon Signed Rank Test</i>			p = 0,127		

Table 3 Distribution of student action on the prevention of ARIs before and after health education with the methods TGT in SDN Mojo 3 Surabaya, May 4-6, 2015.

No	Behavior	Pre test		Post test	
		f	%	f	%
1	Poor	38	88,4	0	0
2	Average	4	9,3	0	0
3	Good	1	2,3	43	100
	Total	43	100	43	100
	<i>Mean</i>		2,86		1,00
	Standard Deviation		0,413		0,000
<i>Uji Wilcoxon Signed Rank Test</i>			p = 0,000		

DISCUSSION

Research shows that health education of teams game tournament improved knowledge and skills of the children, but it did not affect the children attitude toward ARIs prevention. The TGT increased the knowledge of the majority of respondents, although there were some respondents who did not experience an improvement in the category of knowledge. Some respondents remained in the category of average. Roger (1995) illustrates that the acceptance of a person towards an innovation is a process of mental or behavioral changes either in the form of knowledge (cognitive), attitudes (affective), and skills (pschycomotor) in a person. These processess take place since someone knows the innovation until he/she decides to adopt the innovation. Innovation in this research is the method of health education namely teams tournament games that are expected to affect the knowledge (cognitive) of the respondents.

During the research process, basic understandings of ARI were given in a form of lecture at the stage where a facilitator presented the material and outline the problem. Armed with the initial information they already have, in a small group session, each group discussed what solution to problems they can provide for the prevention of ARI in the school environment. Afterward, there was a game on each end to strengthen the students' knowledge about the prevention of ARIs, and make

respondents more eager to follow the process of health education.

According to Bloom, as quoted by Notoatmodjo (2003) several factors may affect the level of knowledge, including internal factors (education, interests and physical condition), external factors (ancestry, society, and the means), and a factor approach to learning (strategies and methods). Increased knowledge after TGT may be influenced by many things. Based on the characteristics of respndens, researchers concluded that the respondents had a character that is considered able to receive and process information well in the hope that increased knowledge of changes in the behavior of ARI prevention in schools.

Other factors that presumably affect learning were students' interests and learning strategies. Students were interested in receiving health education with new methods and strategies because TGT makes them more enthusiastic and easy to understand health information provided, thereby increasing the level of their previous knowledge. We conclude that health education with the TGT methods improved students' knowledge about ARI because TGT was able to deliver the right information in enhancing students' knowledge.

TGT shows not so significant results in altering the children attitude toward ARIs prevention. Although there were enhancements in posttest attitude of some respondents who previously negative attitude turned positive,

there were 12 respondents who remained on the negative category. These results may be stemmed from the processes of this study.

In undertaking this study, researchers gave the introductory material intended to evoke strong emotions that are still in line with the given health education materials. This material contains persuasive messages that enabled students to receive instruction and primary materials easily. The cognitive component was discussed at large proportion on provision of material regarding ARIs and how to prevent that. It was also discussed in discussion sessions and during games. Affective component was touched mainly on introductory material and also implicit in the main material. Conative component itself is the tendency of people to do something that affected affection and cognition. Conative component was pretty much honed during group discussions and games where in the process the respondents were asked to provide a solution of problems related to ARIs prevention in accordance with their circumstances.

The study was conducted 3 days, pretest and intervention on the first day, the second day of the intervention, and posttest on the third day. The very short time between TGT and posttest may affect the results in terms of children attitude. Three days interval between pre test, intervention, and post test may cause the majority of respondents did not experience an increase in attitude. However, respondents score marginally increased at the option of ARIs transmission prevention. This score, although marginal, is paramount because ARIs is highly contagious. Intervention by TGT method should be carried out repeatedly until attitude perfectly formed (Suyanti, 2013).

Notoadmodjo (2003) asserts that attitude is a reaction or response of someone who is still closed to a stimulus or object. Factors that influence a person's attitude, among others (Anwar, 2009): knowledge, personal experience, the influence of others that are considered important, culture, mass media and electronic, emotional, educational institutions or religious institutions, educational level.

Knowledge is an important domain for the formation of attitudes (Widyastuti, 2005), but as we know that knowledge is not the only factor affecting attitudes. There are

several possible causes for the respondents' attitudes did not change significantly or decline of their pretest and posttest results, among others: the students as respondents, the researchers as presenters and facilitators, and implementation of TGT method (Suyanti, 2013).

Judging from the application process and the weakness of the TGT method, there are several factors influencing the effectiveness of TGT. These factors are: the execution time, the atmosphere during the learning process takes place, and the group heterogeneity. The timing of this TGT is a considerable factor into play because this method requires a long time (60 minutes) for the implementation of activities includes lectures, group discussions, and games. The timing of the intervention is done after school in order not to disrupt the process of teaching and learning in schools so that students may begin to feel tired when the intervention took place and reduced attention in absorbing the information provided.

Suyanti (2013) found that TGT less effective in improving students' attitudes about adolescent reproductive health. She also found the necessary an increase in the intensity to be able to change a person's attitude. In this study, an increase in the attitude of the respondents was not so large that it can be concluded that the method TGT not be an effective method to improve students' attitudes about ARIs and thus further research and development is required.

Our observation on the students' behavior shows that TGT significantly increases students' behavior in ARIs prevention, especially hand washing and cough etiquette. Before the intervention, the majorities of children had poor skills in hand washing and cough etiquette because they had never received prior learning related ARIs prevention. After being given the intervention TGT, all respondents, both men and women, experienced improvement in hand washing and cough etiquette behavior.

Leighbody (1968), as quoted by Haryati (2009) illuminates that skills can be trained through repeated practice to become a habit. In this study, students are taught to wash their hands and cough etiquette through lecture, demonstration in class regarding a proper handwash and cough etiquette, during the discussion groups, and during games when

students were required to practice hand washing and cough etiquette of each group in the class. Hence, from a series of these activities the students were able to practice hand washing and cough etiquette in everyday life. The researchers concluded that the method TGT is effective for improving student action to hand washing and cough etiquette correctly.

CONCLUSION

Health education methods by using teams game tournament affect knowledge of school-age children in the prevention of ARI because it is a new, interesting, and enjoyable health education in nature so that children can absorb information well. TGT method has no effect on the attitude of school-age children in the prevention of ARI. This is due to various factors such as the respondent students, researchers, and process execution method of TGT. TGT influences the behaviors of school age children in the prevention of ARI in SDN Mojo 3 Surabaya because of the skill were taught repeatedly during TGT so that students could understand and practice how to wash their hands and performed cough etiquette correctly.

Further research needs to be done, how many times TGT can affect a person's attitude or methods TGT combined with other methods of health education in order to influence the attitude of a person in ARI preventions.

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A FAMILY BURDEN PERCEPTION OF MENTAL RETARDATION CHILD AND ITS CORRELATION WITH ANXIETY

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ABSTRACT

Introduction:Families who have children with mental retardation are at risk of experiencing the problems related to the psychic. Psychosocial problems are most often found in families with a child who has mental retardation is the anxiety and the perception of burden. The purpose of this study was to determine the correlation between anxiety and the families perception of the perceived burden in caring for children with mental retardation. **Method :**The design of this study using cross-sectional design, the population in this study are nuclear families caring for children with mental retardation in Extra Ordinary of State Elementary School Jombatan 7 Jombang. The number of samples are 24 care giver using purposive sampling. The instrument used ZRAS and The Burden Scale. **Result:**The results of bivariate data by using Spearman Rank Correlation test showed results 0.469 p value ($\alpha = 0.05$), which means that there is no relationship between anxiety and the burden perception. **Discussion :**Based on the above results it can be concluded that there is no relationship between anxiety and perceived burden of the family in care of children with mental retardation. Mental health nurse must be able to identify an appropriate nursing intervention to address psychosocial issues that may appear on the different families who have children with mental retardation.

Key words : mental retardation, anxiety, burden perception

INTRODUCTION

Having the child with mental retardation can create many problems in family. One of the most emerge problems is the anxiety and burden perception of family. Mental retardation is a genetic disorder which is manifested by intellectual functioning below average and there is a deficit in adaptive behavior. It is happened began in childhood with the decline characteristics of intelligence and adaptive skills and developmental disorders in general (Armatas, 2009). The children prevalence with mental retardation in Indonesia based on the Data RISKESDAS also showed the increased, the children with down syndrome also as a one of the cause mental retardation from 0.12% in 2012 become 0.13% in 2013 with mental retardation incident in a developed Country about 19 per 1000. Family admission to the child with mental retardation is different depend on the coping mechanism of this family. Parents who have a child with mental retardation have a hesitation of being love or independently child, having depression with the future of child. The public opinion also adds to the burden of families.

Results of a preliminary study in Jombang at Extra Ordinary of State Elementary School results of interviews with 10 mothers of children with mental retardation, the data obtained qualitatively that 7 of 10 mothers said anxiously about the future of children and economic problems. While 6 of 10 mothers said burdened primarily psychological and economic.

A condition that caused the parents' anxiety, one of them is the condition of their child, especially when he/she have a mental retardation. The parents' anxiety increased as the age of child. The increased age of child affects the parents' anxiety because of the high dependency of children to his/her parents. According to Mohr (2006) the anxiety is one of the subjective burden components. Generally, the anxiety will be directly proportional to the burden perception. The higher level of anxiety makes the higher level of burden perception also.

The impact of anxiety and perceived burden of the family if not addressed will affect the functioning and well-being of the family. It will also have an impact on the care

of children, so the negative impact will also be felt by the child. The existence of these problems led to a family function may not work properly. One of the roles and functions of the family is to provide affective function for completing psychosocial needs of its members in providing affection (Friedman, 2010)

Until now the correlation between anxiety and burden perception still unclear and need more research. Based on the above phenomena, researcher wants to hold the research about the correlation of anxiety and burden perception.

METHODS

Research design that used is correlation analytics with cross sectional approach. The sample is a family (father or mother) who have a child with mental retardation in state elementary of extraordinary school Jombatan 7 Jombang in group C class 1-6, totally 24 families from 28 families which is taken one of the family as a care giver in accordance with the criteria for inclusion. The technique that use is purposive sampling. The research instrument of anxiety levels is questionnaire anxiety from *Zung Self Rating Anxiety Scale (ZRAS)* consists of 20 question items, while the instrument to burden perception is a result modification from instrument to gain the data about family burden, the research adopt and modify from *the burden scale* which consists of 22 questions. The questionnaire has been tested for validity and reliability.

RESULT AND DISCUSSION

In this study, the data obtained anxiety and perception of family burden, can be seen in the table below.

Table 1. Distribution of Anxiety in Families who have a child with mental retardation in state elementary of extraordinary school Jombatan 7 Jombang 2015

No	Subject	Amount	%
1	Mild	17	70.8
2	Moderate	7	29.2
Total		24	100

Table 2. Distribution of the burden Perception in Families who have a child with

mental retardation in state elementary of extraordinary school Jombatan 7 Jombang 2015

No	Subject	Amount	%
1	Mild	8	33.3
2	Moderate	12	50
3	Severe	4	16.7
Total		24	100

From the data collected and processed, the result of this research is p value about 0,469 is on the alpha ($\alpha:0,05$). The data is processed statistics test of rank spearman's correlation; it showed there is no significant correlation statistically between anxiety and burden perception that family's feel in carrying the children with mental retardation.

The anxiety and burden perception is the problems that have to solve in family. Both of them are relate to each other, if it is not solve in a long time, it will give negative effect to all the member of families. It is supported by Calderon et al (2011) in his research said psychologies distress and anxiety has positive correlation with burden perception which felt by care giver and it give a bad effect to the family's harmony. Therefore it is important in early detection of psychosocial problems before its sustainable.

The opposite result was found in this research said that there is no significant correlation statistically. It is marked using p value over a. there are two kinds of burden perception, they are: subjective and objective burden, which anxiety include in subjective burden. Researcher assumption is not only subjective burden that increase the burden of family, but also the increasing of objective burden in caring the child with mental retardation such as limitation of time, exhaustion physics and economics burden.

Some respondents complain with the heaviest burden that they feel is economics' problem. Because the children dependency make the parents can't do the maximal work. The children with mental retardation need extra financial support. This is appropriate with the research; the absolute burden is economics' problem because of the minimum income of family. While, children with specific requirements need more facilities than normal children (Parish et al, 2012). In this research, the average of other families can not work to support the income because they must care the child with mental retardation at home,

although the family's income is under the minimum of wages.

In this research the average of family's income is under the minimum of Jombang wages, it is appropriate with the research that is conducted by Gulseren et al (2010) that concludes there is a significant correlation between income and family's burden. It is effected life poverty condition, Limited transportation, the cost of child's education in specific school, lower children's nutrition, and limited of the public health center. Variety of problems that emerged will be affected to the unhealthy mental condition in family and will be affected also to the quality of life.

The other research was conducted by Khamis (2007) explains that the objective burden feels heavier to the family than subjective burden. It is only affected to the care giver and sometimes try to push, will the objective burden will be affected to the quality of family's life start from the nutrition food, home and education of child.

Objective burden because of the minimum time also give negative impact to the care giver's healthy (Khamis, 2007). The caring of child with mental retardation takes many times because of the dependency of child. Therefore, many care givers have least attention to their condition and easy to suffer the illness. In addition to the objective burden that affects the perception of burden, stigma society is also one factor that was instrumental increasing the perception of the burden of the family in the care of children with mental retardation (Green, 2007). This stigma is very strong, especially in Indonesian culture which can lead to feelings of shame and guilt on the family. This feeling is one of subjective burden, and has more impact on the family burden compared than anxiety.

From many researches strengthen the result of this research that there is no significant correlation between anxiety and burden perception which is possible of the subjective burden is not significantly than objective burden.

CONCLUSION

From the description above it can be concluded that anxiety is not always affected to the high burden perception of family in caring the child with mental retardation. There are many factors in subjective burden which can affected burden perception beside the anxiety.

SUGGESTION

Anxiety and burden perception is one the psychosocial problems will be faced by the family who caring the child with mental retardation. The problems must be solved with the right action. Mental health nurses have to identify the problems and take the right action in order to create the good function of family.

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FAMILY STIGMA WHO'S FAMILY MEMBERS HAVE SCHIZOPHRENIA

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ABSTRACT

Introduction: Schizophrenia's stigma has a serious effect for schizophrenics and their family. This stigma may worsen the relationship between a schizophrenic and normal people. Once this stigma is detected within a person, they will do anything to reject the fact. Such example is by social isolation or some extreme cases of this are being put in a stock and family's refusal in taking the proper medication. The purpose of the research is to identify the schizophrenia stigma in the inflected family.

Method: This research is a study case descriptive with 2 research subjects. It was held in 2-27 April 2015. This research used free guidance interview to take the data with previously prepared instrument.

The data was in the form of narration. **Result:** Result of this research showed that the second subject (Mr. M's family) suffered from public stigma and self stigma. These two points were indicated by labelling, separation, and discrimination on their social relationship with the neighborhood rapidly.

Discuss: for families do not cover your self with the presence of schizophrenic at home and still socialize with their environment, as well as play an active role in their care.

Key words: stigma, family, schizophrenia

INTRODUCTION

Recently, mental disorders has become serious problem. Increase the number of mental disorders have considerable influence in the increased morbidity of a nation, as well as a decrease in the number of productivity of a country. Schizophrenia is the most severe form of functional psychosis (Ingram, 1993) which is characterized by disorganization of the personality that is severe enough, the distortion of reality and an inability to interact with daily life (Ardani, 2008). The disease is likely to continue or chronic and require treatment in the long term.

Various clinical manifestations, symptoms, and treatment of patients with schizophrenia are at cause various perceptions in society. Negative perceptions regarding patients with mental disorders are often the labeling and stereotypes for patients with mental disorders.

Baron (2002) defines stigma as the characteristics of a person that is considered negative by some other individual. NN (2014) also explained that the stigma is a marker of the disgrace that is formed on the part of someone. When someone has been labeled on their diseases, they look like a group stereotypes. The negative attitude creates a

presumption that forms the negative action and discrimination.

The existence of stigma often cause negative impacts. Stigma can lower self-efficacy, self-esteem and self-concept is also owned by a person or group, without exception by a family with a mental disorder. When this happens to a family stigma, the effectiveness of the treatment and cure of patients with schizophrenia can be said to be doubtful. While the role of the family is fairly important for further treatment in dealing with this schizophrenic patients as well as to prevent recurrence.

The number of shackled person who suffer schizophrenia is quite large. The phenomenon that occurs at this time is about the denial of family to schizophrenic patients. Schizophrenic patients often ostracized by society and often for security reasons many patients shakled (Kurniawan, 2014).

In the other cases concerning the treatment of schizophrenia, there is rejection by the family toward the patient of schizophrenia. Neglect is often found in some of the services which are managed by the department of health or social services. The family did not want to take back and care for family members with schizophrenia. The results of observation the author, the patients

with psychotic has improved rarely visited by family or heard from family.

Based on preliminary studies that have been conducted in 2015, recorded at least 40 psychiatric patients who are in Singosari Community Health Center and 62.5 % of these patients are schizophrenic. The existence of these patients led to differing perceptions on the surrounding community, especially among teenagers who have a negative perception of this. Some people believe that person with mental disorders (schizophrenia) scary, disgusting appearance, they do not understand when is being talked to, difficult to cure and their recovery is doubtful. One of the families of schizophrenia patients also revealed that families sometimes feel embarrassed and confused by his condition and appearance.

Based on the above description of the phenomena, it is important to do a further study on the stigma of families who have family members with schizophrenia. Formulation of the problem in this research is "How does stigma overview of families who have family members with schizophrenia?"

The purpose of the research is to describe the picture of the stigma of families who have family members with schizophrenia. This study is expected to be beneficial to health workers, the health department and social services, which is expected to assist in preparing the program which can reduce the stigma that exist in the community or family about mental disorders the stigma.

METHODS

This type of research used in this research is a case study that aims to describe (explain) the stigma of families who have family members with schizophrenia will intensively examines the stigma of the research subjects.

Subjects in this study is a 2-3 member family of two families who have family members with schizophrenia. The criteria established in this case study are as follows: Has a close relationship with a schizophrenic and is responsible for the care him/her. Live in a house with schizophrenic. Communicative

The main focus of research or focus study is the stigma of families who have family members with schizophrenia. The operational definition of the focus study, as follows stigma families who have family members with schizophrenia in this case study are the views

and negative thoughts that are owned by families who have family members with schizophrenia, which is based on the level can be classified into three, namely: public stigma , self- stigma and label avoidance. 1) Public stigma or social stigma is the negative perceptions held by the public regarding mental disorder schizophrenia that appear on people's lives and felt schizophrenic patients and his family. 2) Self -Stigma is the perception or negative view of themselves are often marked with self-esteem and low self-efficacy, lack of confidence, and a sense of self-blame that one of them as a result of the stigma that exists in society. 3) Label avoidance is an attempt to avoid the health service in order to avoid the label or stamp mental disorder given by others. This is done as a result of the stigma about mental illness, either of oneself or others

The parameters used is based on the components of stigma which consists of labeling, stereotyping, separation, loss of status, and discrimination.

Research was conducted in February 2015 at the family house who have family members with schizophrenia in Singosari Community Health Center is one of 39 health centers located in Malang East Java.

This research used the free guided interview technique. The research instrument is the questionnaire with open-ended questions that had been prepared in advance and made by researchers according to the theory of Link and Phelan (2004) of the component stigma. Research carried out by the data collection techniques such as interviews intensively and observation by visit to the home of research subjects.

In the case study used data processing nonstatistic is a qualitative analysis, that used inductive thinking process. The data has been processed will be presented in textual form and accompanied by footage of the verbal expression of the research subjects. The author will omit some dialog or sentence delivered by research subjects as supporting data to support conclusions or identification data obtained. This research used the ethics approach, included: informed consent, anonimity and confidentiality.

RESEARCH RESULT

In this study, researchers took two research subjects who have family members with schizophrenia.

1) Overview of Subject 1

Subject 1 live in a permanent house with an area ranging from 72 m². The housing conditions is fairly clean and neat with tile floors and sufficient ventilation.

The neighborhood around the house is a settlement with people who have a social relationship and concern is high enough. Various social activities in the township is also often carried out as a routine recitation and *tahlil* (Islamic religious activity)

Subject 1 in this case study is the family of Mr. S. The subject is a Muslim family with the ethnic background of Java. Mr. S is the biological father of clients. Mr. S 69. The family members Mr. S can be seen in the table 1 as follows:

Table 1. List of family members subject 1

Initial	Age	Relation	Education	Job
Mr. S	69 th	Father	Islamic secondary School	Tailor
Mrs. M	65 th	Mother	Elementary	House wife
Mr. F	36 th	son/client	Vocational Highschool	<i>Ojek</i> (motor cycle) driver

Clients in the subject 1 was Mr. F. The client was 36 years old and suffered schizophrenia since 2002, is six years since graduating vocational school. At that time he became the students and pursue his Islamic studies in one of the Islamic Boarding School in Kediri.

Mr. F still experiencing hallucinations with frequency reduced and he has been able to control his hallucinations. Currently he is undergoing treatment in the way Dr. Radjiman Wediodiningrat Mental Health Hospital of Lawang. Previous history he had been treated in Dr. Radjiman Wediodiningrat Mental Health Hospital of Lawang much as 13x and 10x Saiful Anwar Hospital. He underwent treatment last in about 1 month, that is September 2014 at Dr. Radjiman Wediodiningrat Mental Health Hospital of Lawang.

2) Overview of Subject 2

Subject 2 live in permanent residential houses with an area of about 28m² or 7x4 m, consists of two floors. Ventilation and lighting of the house can be somewhat less because of the location of the house which coincide with the house next to it. The home environment area is in the villages with a fairly dense population.

Subjects 2 in this study is the family of Mr. M. The subject is a Muslim family. Mr M is the biological father of the client, he is 63 years old, the last junior high education background and Sundanesse. Mrs. M. is the biological mother of Mr. A that directly involved in the care of Mr. A. She is 62 years old, with the last junior high education background and Javaness. The family members Mr. M can be seen from the following table 2:

Table 2 List of subjects 2 family members

Initial	Age	Relation	Education	Job
Mr. M	63 y.o	Father	Junior High School	Merchant
Mrs. M	63 y.o	Mother	Junior High School	Housewife
Mr. A	63 y.o	Son/client	Junior High School	No job

Clients in the subject 1 was Mr. A. He is the third child of four siblings who are all married. The client is 32 years and suffered from schizophrenia since 2009. He has been undergoing treatment at Dr. Radjiman Wediodiningrat Mental Health Hospital of Lawang as 1x in 2009. The treatment was not long since he ran away from this hospital.

This time he underwent treatment in the outpatient treatment of Dr. Radjiman Wediodiningrat Mental Health Hospital of Lawang but still do not comply with good treatment. With regard to this day he is still experiencing some hallucinations, such as auditory hallucinations, visions, and also smell and he still has not been able to control his hallucinations well. In addition, he also ever hurt other family members, which beat his mother up to the area around her eyes and also hit his brother

Focus Exposure Study

The focus of study in this research is the stigma of families who have family members with schizophrenia. Here is a description of the exposure of stigma on both the research subjects.

1) Subject 1

Mr. S family's always try to have positive thoughts about healing his disease. Subject had never tried to discriminate or differentiate the client from other family members. In the family, the subjects also had several children have grown up and successful, who continue to give positive support to the family for the healing process of the client until the client's wedding plans.

The exposure of the components of stigma interviews conducted on the subject 1 as follows

a) Labeling

The subjects revealed that people still give a good response to the client and his family. Society always call the client with his name and no discrimination to the family members of schizophrenia. It is a statement that reveals the subject:

"The response of people still good to my family, they understand my son condition".

The subject also revealed that the condition of the client sometimes made her sad, but she never felt shame or remorse. Subject has positive thoughts and believe that this was a test from God for their families. This is the subject said:

"I do not feel embarrassed, because this is all the trials of God. Only sometimes I feel sad, stressed by conditions like this and kept me thinking". Subject also explained that the family will never cover their schizophrenic in his family.

b) Stereotypes

Family has the perception that mental disorders experienced by members is a disease that occurs because of a trance. Families have a perception that because inside there is no family history of family members with mental disorders. The family thought that this disease is still curable. This is consistent with the statement that expresses the subject:

"I am confident that this time he has healed in shaa Allah by looking at his condition now, hopefully this is the last, because something bad that is not properly has been taken from my child. I'm sure there is not even a disease that has no cure, there must be a cure for every disease".

c) Separation

Subject says that they never felt separated from the environment, isolated, ostracized or to isolate themselves. The process is also well established interaction

between the family and society. This is the subject said:

"The process of interaction is good, my son is also aware of his condition and previously known as child friendly and courteous. He often recite Al Qur'an/prayer in mosques sometimes led the recitation in the mosque. My relationship or family are good people, people can accept me and my son".

Based on observations, people in the village subject of a fairly high level of awareness. This is shown by the attitude and friendliness of the people against the client's family.

d) Lost status

The family is still running the role and duties as normal. Mother's clients continue to have its role as a housewife, client's father run his role as head of the family and toilor, as well as clients remain a child and will soon propose to his future wife. In community activities, client and client's mother is still active in participating in various activities.

e) Discrimination

Family and client have never discriminated against or treated differently from others. Families are always seeking the best for the client and the client wants a speedy recovery. This is the subject explains:

"..They understand but do not attempt to distinguish or designated of the environment. I also attempted to apologize when my son makes mistakes on them. I always tried to do everything, and I hope in return to goodness and success for my children later."

2) Subject 2

Second subject is the family of Mr. M. In the process of interview subjects tell all about her family and her condition and occasionally the subject cries when she felt her condition. He also explained that the relationship with other family members is not good and do not understand the conditions of perceived subject and client. The exposure of the interview concerning the components of stigma on the subject as follows:

a) Labeling

Based on current observations and a description of the subject, the subject is rarely socialize with their environment unless their next home and health authorities. This is the subject saying:

"I do not know what people are says about us. I do not care others as well. It

makes me not to listening to them, do not know what their response. I also do not join with them. "

Subjects also said that he felt shame and regret with their schizophrenic in his family:

"I was crying and crying. I kept thinking of how to do something with him and his activities. He was loud and constant angry with me, like he does not want to take medication, and if he was angry sometimes hitting goods... "

In addition, the subjects makes the opinion that it is better the client (Mr.A) who died ahead than us, while other family members are still there who do not understand and care about the condition of the schizophrenic.

b) Stereotypes

In terms of stereotypes regarding their mental disorder schizophrenia, the subject stated that he did not understand the disease, the symptoms it causes, and the genetic factors and the potential reduction in these diseases are genetic. The subjects also found the disease is likely due to the existence of the problem and still be cured

c) Separation

The subjects explained that clients shunned by the local community. Subjects also explained that they are also less care for his family. The existence of these conditions and supported by the state of poor families as well as the client's condition as such, make the subject more restricted himself and clients to associate with their environment. Many communities that do not provide a response in particular to the clients. When clients talk, a lot of people do not care and leave the client. Subjects said:

"Yes someone say that A is mumbling, or say something which is no clear..."

Additionally, subjects also added:

" nobody can be trusted, sometimes they good at the only time but after that just like that... " The subjects were also limiting the client to associate with their environment.

d) Lost status

Subjects revealed no change in the role that occur in the presence of mental disorder schizophrenia. But the other explanation, the subject explained,

"His father did not want to know about things like this, housing conditions,

etc. He just get to work and earn some money, work, and work. I take care and bear all the things, nobody seem not understand. "

Based on the observations, the family tends to be the subject of a passive society. The client and his father rarely join and take part in community. This is consistent and appropriate by one of the speakers outside the research subject, namely Mr. X. He says " he has a close relationship with clients and find out how the client's life and family".

According to Mr. X, the client is a child which has limited freedom by his mother. His mother is an authoritarian where his every step and association severely restricted and monitored. The client's mother did not want the client to have too close a relationship with others. Mr. X also argues that the restrictions made by his mother to make the client more stress and frustration with life. So with these restrictions, also rarely socialize and follow the activities on the environment.

e) Discrimination

The subject explains that the public is less caring to client and being picky, especially in people with a family less fortunate and are characterized as clients. The subjects revealed that people tend to talk about something in the back and there are some people who initially close to be so much for no apparent reason and a definite problem.

DISCUSSION

Based on the presentation, it can be concluded that there is no negative stigma towards clients and research subjects. The public has a positive assessment and showed sympathy to the family and the client schizophrenia. Subjects also have a good attitude towards the client and there is no stigma and negative thoughts to himself.

This is not in accordance with the opinion of Been Zeev et al (2010) which explains that a psychiatric disorder is havoc in the life of someone who has the disorder. Gullekson in Florez and Sartorius (2008) also revealed that stigma is a loss, which resulted in the issue of unresolved grief which could also lead to mistrust other people and families will bear the effect of the continuation of the effects of the stigma (Dubin & Fink, 1992; Fink & Tassman, 1992).

Some of the things that allow influential that stigma does not occur, such as: the

existence of a good reception from the family, the factors of good socialization, family support and social identity are positive, and environmental conditions that support that is the people who have a concern is high enough to each other.

In theory and the concept model of consistency of the cultural heritage of Spector RE: Cultural diversity in health and illness ed. 3 in Potter and Perry (2005) explains that there are several factors that can affect the socialization factor. These factors, namely: cultural factors, religion, and ethnicity. In addition, several important points were involved in it, namely: a large family and its role in raising a person, place of residence and raised, and the name they owned.

Based on the exposure it can be concluded that the subject 2 experienced public stigma and self-stigma. This is indicated by the presence of some components of stigma experienced, that their labeling, lost of status, discrimination and separation from society. Based on interviews, the subjects also had low self-esteem and to restrict themselves to the social environment.

This is consistent with the theory described by Passman (2010), which explains that the negative experiences of stigmatization and discrimination result in a person fear of rejection, impaired self-efficacy, and someone could act more defensive, the decline in confidence, or sometimes avoid social interaction.

With self stigma and publicly stigma owned by the subject can be caused by several factors. These factors, among others: poor social identity, lack of socialization factors, and family support as the main support system is inadequate.

Social identity according to Goffman (1963) is the appearance that helps a person assess and put others first, and their social life and regular repetition will explain which of these categories is expected (Larsen & Lubkin, 2009). Social identity includes a variety of characteristics, such as: gender, name, self-concept, ideology, interpersonal relationships, custom attributes, and ethnic or religious affiliation (Baron & Byrne, 2004).

The existence of discrimination by the society makes these families increasingly withdraw from social life. Link and Phelan (2001) explains, there are five components of stigma: labeling, stereotyping, separation,

missing status (status loss), and discrimination. Link (2001) in Green et al (2005) found that labeling is a recognition of difference and determination of social protrusion of the discrepancy. Involvement labeling not only on the perception that someone is different, but also on the determination of the differences in social meaning. Rosenhan (1973; Foster, 2005) revealed that as in the case of psychiatry, for example schizophrenia, when the person has been labeled with schizophrenia and schizo impressions are formed, then the views or other people's expectations of the person will be forever.

Another characteristic of social identity which refers to the emergence of stigma is a factor of interpersonal relationships. There are various things that can affect or change the social identity, such as the inability or 'disability' which could potentially form the stigma (Markowits, 1998; Larsen & Lubkin, 2009). Interpersonal relationships in the family is quite less because of the family that limits itself to socialize with their environment. Besides this, the symptoms shown clients, lack of family support as the main support system and role dysfunction can further lower sense of confidence in solving this problem.

Subjects also had ever a problem with the social environment, it may cause him more shy with their surroundings. Their negative experiences of stigmatization and discrimination result in a person fear of rejection, impaired self-efficacy, and someone could act more defensive, the decline in confidence, or sometimes avoid social interaction (Passman, 2010).

CONCLUSSION AND RECOMMENDATION

Conclusion

Based on the exposure results and discussion, it can be concluded that:

On the subject 1 of family research Mr. S did not reveal any stigma associated with schizophrenia in their client families. This is supported by the good perception of the family, good socialization factors, family support and positive social identity, as well as environmental conditions favorable for that is the people who have a fairly high awareness of each other

On the subject 2 of family research Mr. M suffered the stigma of public stigma and self-stigma. This is indicated by the presence

of some components of stigma felt by family, namely: labeling, separation, loss of status, and discrimination. Families also have the self-confidence is low and resulted in more families avoid the social interaction with the environment. It can be influenced by several factors, among others: poor social identity, lack of socialization factors, and family support as the main support system is inadequate.

Recommendation

For health professionals, health services and social services related with the stigma of families who have family members with schizophrenia, it is expected health personnel both health centers, health departments, or agencies associated establish a program to reduce the stigma of schizophrenia in the community or the family of the patient, such as health education and advertising and propaganda assessed can reduce the stigma about schizophrenia.

Family, expected families do not cover yourself with the presence of schizophrenic at home and still socialize with their environment, as well as play an active role in their care.

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PROMOTING SOCIAL INCLUSION FOR INDONESIAN MENTAL HEALTH CONTEXT: A REVIEW OF THE EMERGING SOCIAL INCLUSION LITERATURE

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ABSTRACT

Introduction: After the closure of mental health hospital in the western world, the mental health service users are now involved in the wider society interactions. However, another problem arises as the consequences of the closure, which is how to integrate the service users in the social lives without experiencing hindrances in those processes. Therefore, mental health services in the western world are now shifting the focus to overcome the barriers by promoting social inclusion. However, it appears that deinstitutionalisation in mental health would not become the main issues in the foreseeable future for Indonesian mental health environment. Therefore, social inclusion is not the main issues in mental health circumstances in the country, yet, the community integration, as it happens in western world, also remains the main issues in recent days. **Method:** This paper provides a review of the emerging social inclusion literature as part of the recovery process which gradually implemented in the Indonesian mental health context. **Result:** Research findings are highlight the understanding of the cultural background of the society to whom such concept will be implemented, discuss the social inclusion and exclusion, in the context of European and Islamic culture as a religion that is embraced by the majority of the people in the country. then the implication of social inclusion promotions in practical ways. **Discussion:** Social inclusion is also able to be implemented with the local consideration. The three places which are Mosque, Family, neighbour, are the reasonable area where people with mental health will experience the appropriate access and support.

Key words: Social Inclusion, Mental Health, Promotion

INTRODUCTION

Indonesia is a developing country which has also been influenced by the gospel of liberalisation, privatisation, deregulation and welfare minimalism. Therefore, the country would have a strong indication experience the similar problem such as inequality and injustice for people with mental health problems when exposed to social and economic worlds. Labonte (2004), explains a wider perspective about social inclusion and its relations with social-economic, neo-liberal economic assumption, and how society, by nature, will exclude certain group due to their inability to compete in today's world. In addition, people with mental health problem will become the most excluded group in the society because of the domino effect among unemployment and opportunity to participate in the community (Repper and Perkins, 2003).

However, it appears that deinstitutionalisation in mental health would

not become the main issues in the foreseeable future. Therefore, social inclusion is not the main issues in mental health circumstances in the country, yet, the community integration, as it happens in western world, also remains the main issues in recent days. Thus, preparing the society is the most crucial aspects of the efforts to make the society ready to accept mental health service users for the future closure of mental health institution and normalization in the community.

In this review I would like to highlight several issues that would help in understanding the mental health circumstances on how to implement social inclusion promotion in the society, in which the social, cultural, and economic backgrounds are different from those of the origin of this concept. Through several steps, I would start with the understanding of the cultural background of the society to whom such concept will be implemented. I will then discuss the social inclusion and exclusion, in

the context of European and Islamic culture as a religion that is embraced by the majority of the people in the country. Lastly, I would discuss the implication of social inclusion promotions in practical ways.

Indonesia is a country with a population of more than 250 million, and more than 200 million of them are Muslims (Pew Research Centre, 2011). The population is spread over several big islands among the 17,000 islands in the archipelago. This geographical area shapes the variety of culture that exists in the country. Besides being a part of eastern culture with its characteristics, Islam has also essentially influenced the cultures of the country. World values survey (Inglehart, 2003) also reported that Indonesia has the biggest percentage of people who view that religion is “very important” in their lives. Pew Research Centre (2013) also released a report which said that the percentage of the people of the population who want 'Sharia' to be imposed as the official law of the country is 72%. Consequently, by understanding this mixture of values and culture, it will enable us to develop the best approach for social inclusion promotions.

As a developing country, Indonesia has faced many economic problems and natural disasters that influence the psychological and emotional condition of the people. Such influences can be seen from the survey conducted by the Ministry of Health of Indonesia (Departemen Kesehatan RI, 2007), which found that in this country there are around 11,6 % of the population aged over 15 years old experiencing moderate mental and emotional problems such as depression. However, this number may vary which ranges from 1.7% to 33.7% in some areas, including the area in which the tsunami has caused around 170 thousand people died (BBC, 2010). In addition, there is also 0.5% or around one million people with severe mental health problems (Departemen Kesehatan RI, 2007). Meanwhile, similar research conducted by the Ministry of Health presents the decline on the percentage in every area (Departemen Kesehatan RI, 2010).

Limited policy towards mental health has been a barrier for mental health profession. WHO (2011) reported the un-existed of dedicated mental health legislation in this country. Furthermore, the mental health nurse as the major part of health care profession in this country has been reported by WHO (2011)

that they have not been provided with any official in-service training in their specialist areas for the past five years. In addition, mental health related facilities are not comparable with the number of people with mental health problems. For example, there are only 7,700 beds provided for 48 mental hospitals for around one million people with severe mental disorders (WHO, 2011). Furthermore, there is also an increase of the number of people visiting psychiatric clinics (Safitri, 2011). There is also a report that some people with mental health problems still are experiencing shackling which is locally known as 'pasung', even though such practices have been banned in Indonesia since 1979 (Vaswani, 2013). While gathering the accurate number is still difficult, it is predicted that more than 30 thousand people with mental health are constrained in 'pasung' (Schonhardt, 2011).

Stigmas also play a significant role in this country. A stigma is defined as “*an illuminating excursion into the situation of persons who are unable to conform to standards that society calls normal*”(Goffman, 1974). A stigma also causes a sense of shame and difference which may lead to a belief that one does not belong to a community (Byrne, 1997). The stigma affects every aspect of lives of people with mental disorders, so that it brings multiple problems such as losses of jobs, problems with insurances, or getting best treatment (Fink and Tasman, 1992). A stigma is a degrading and debasing attitude in the society that discredits a person or a group with mental health problems (CEAS, 2014). This will result in destroying a person's dignity, marginalising affected individuals, violating basic human rights, markedly diminishing the chances of a stigmatised person achieving full potential, and seriously hampering pursuit of happiness and contentment. A stigma has also made people or families with signs and symptoms of early mental health disorder reluctant to seek the treatment from mental health services (Safitri, 2011).

The low economic level has also made over 80% of the population consult traditional healers which provide services ranging from spiritual to mixture of both medical and traditional treatments (Ito, Ya and Suzuki, 2012). Such behaviour is one of the reasons for the low formal service use in the region.

Defining social inclusion / exclusion

The globalization has influenced every society in the world. People are easier to be excluded because benefits and capitals and state structures create inequality of wealth distributions. These global environments have put barriers in the social inclusion due to social structure that has made them excluded in the first place (Labonte, 2004). In the wider view, Labonte (2004) listed some groups that by nature are in the need of inclusion which are women, racial minorities, the poor and the sick, those with disabilities, children and youth. Therefore, those who will be disadvantaged by the social process will be in high risk group of exclusion.

The notion of inclusion is hard to define and has many possible meanings. Whilst 'mental health' is also hard to be defined, there is increasingly use as an euphemism for 'mental illness' in service provision, social inclusion and exclusion are increasingly used either interchangeably or, as we shall see, as unproblematic opposites (Spandler, 2007). Social inclusion is often described in relation to social exclusion which defines as a person or a group of people having limited opportunity for participation in education, work and leisure (Schneider, 2008). People with mental health disorder have become the most excluded group in the society (Repper and Perkins, 2003). Mental health problem has affected or combined with problems such as unemployment, poor skills, low incomes, poor housing, high crimes environment, and bad health and family breakdown (Repper and Perkins, 2003).

Mental disorders have massive affect to the person experiencing it. It can cause disability and suffering, bring about economic losses, lead to exclusion, and influence the development of subsequent generations, possibly even more than physical ill-health. The common mental disorders are shaped by various social, economic, and physical environments operating at different stages of life in the society (WHO, 2014). Social inequalities, whereby the greater the inequality the higher the inequality, become the risk factor of mental health disorder. People often experience stressful life events from family life to workplace environments. However, the personal coping mechanism in dealing with stressor events is often the consequence of social location that reflects broader pattern of

how society is organized (Avison et al., 2007). This means that defining society is needed to see the different type of society and how they emphasis its aspect.

Society as the object of inclusion process needs to be viewed from different perspectives in order to create the closeness to the reality of the defined object. The appropriate definition of the society which represents the characteristics of the object will highlight the important issues. Therefore, it will decide how social inclusion concept could be implemented. Society is the most comprehensive and complex type of social structure in which interweaving of people interactions and relationships are in the stable pattern (Hughes and Kroehler, 2011). Society is then defined as a group of people who live in the same area and share the same culture (Hughes and Kroehler, 2011). Another definition includes environments in which also become an essential factor as in people (Baxter, 2007). From those two definitions, it appears to show that the emphasis of the society is on the individual or people as the central of interactions. Such emphasis is referred to as identity that centres itself, so that life considerations are more motivated by personals than social. This interactions models is in contrast with non-western culture where social relations is the primary importance (Schumaker, 2001).

Islam, on the other side, also defines society and brings emphasis on the other aspects. Culture in the society is always influenced by history, place and time. Although different groups experience different influences, Islamic cultures around the world share common features. These include the type of societies which are mainly patriarchal and hierarchal and keenly support deference to authority. In addition, These are relatively collectivistic societies in which the individual's behaviour is determined more by norms, roles and goals of their collective, then by personal attitudes, perceived rights and dislikes. traditional values are emphasized in favour of social constancy, and cultural change is perceived as threat (Pridmore and Pasha 2004).

Mental health is a broad area which includes severe mental disorders such as schizophrenia and a lower state of mental disorder such as mild depression. Mental health circumstances include cultural, political,

economic values and also scientific facts about psychology and biology, which do not often provide clear-cut list of criteria to enable to identify or exclude all instances of mental disorder (McNally, 2011). Spiritual values have also played important roles in reducing the anxiety level by providing cognitive structure which is manifested in its coping strategy such as grounding the form of meaning of life, the purpose of life and also hopes (Schumaker, 2001).

Islam as a religion, beside regulating Muslims in the wider contexts, also provides personal concepts on how to deal with anxiety and any problems in daily life. In the basis of cognitive structure, the prayer as one of the religious practices appears to be a common practice to reduce stress for people regardless their description of prayers as a religious practice or not (McNamara, 2009). Such practice also affects mental functions associated with frontal lobe (McNamara, 2009). Mental illness is difficult to define precisely. Every society has different understanding about values of behaviours which are regarded as being mentally healthy or ill (Videbeck, 2011). Therefore, it is important to define clearly what mental disorder and its circumstances are based on the Islamic perspective. The clarity is needed in order to judge the object in accordance with the Islamic law.

Implication of promoting social inclusion

Mental health is still less likely to get a place in policy and program development. This condition is probably caused by a lack of proper understanding of the mental health, both by policy makers and the community. Mental health is a general term which does not merely mean 'insane' but also includes circumstances where all people can actualize their potentials, able to function actively and meaningfully, so as to contribute positively to their families and communities.

Public education that led to the awareness and commitment of the society in developing a society where stigma could be minimised is an important goal of all people. By this, people with mental health disorder will be able to increase their productivity and functioning in the society, and increase life satisfaction in wider community. In regards to the social-economical-geographical context of the country, the social inclusion promotion will

found its effects on the context of increasing the opportunity of the well established social services for people with mental health without experiencing stigma from the society.

Social dimension has an important influence in the inclusion processes. Repper and Perkins (2004) proposed to Develop services that facilitate access for people with mental health problems. People who have been labelled as 'people with mental health problem' often find themselves marginalized and stigmatized by society (Watkins, 2007). Thus, an important effort to promote social inclusion is by developing services that facilitate access. However, in the Muslim community, the common service that enables them to meet each other every day is in 'the mosques'.

A mosque is a building in which Muslims worship God. Throughout Islamic history, the mosque has been the centre of the community and towns formed around this pivotal building. Nowadays, especially in Muslim countries, mosques are found on nearly every street corners, private institutions and public areas, making it a simple matter for Muslims to attend the five daily prayers. The mosque also becomes the centre to bind people in the community. This means that mental health service users will find daily access to meet people in the community. Besides such regular meeting is advantageous, it also becomes a drawback due to the rapid spread of stigma. Therefore, by providing the best and strong judgement from the Islamic concepts, it will reduce the stigma in the society in a rapid way due to its unremitting interactions. Thus, the barrier for people with mental health problem to be accepted in the community as general is just by minimising the stigma. Such community engagement appears to be a low-risk strategy and relatively low in cost. Its predicted outcomes include lower stigmatisation of people with mental health problems and greater social cohesion in given communities (Schneider, 2009).

Family support is also important for the social inclusion process. Islamic thought that binds the interactions of Muslim communities has brought the uniqueness type of society. Islam offers such actions which are different from any the other types of society. The concept of Islam about family and neighbourhood are still embraced by the overwhelming majority of Muslims. Family

units are viewed as the foremost and fundamental institutions of society. Indonesian society which still embraces the Islamic values are also characterized with the uniqueness of interactions of men and women in the society

Within a Muslim family, men have position of authority, so that he is able maintain order and discipline as the head of the household. With such authority, a father is also accountable for the first guardian for people with mental problems in the family, then grandfather as the second (Chaleby, 1996). Such responsibility will include providing basic human needs. Therefore, this model of family interactions will be able to replace the 'employment' aspects in the social inclusion process. However, many argue that the promotion of social inclusion is about more than access to employment and conceptualise inclusion as involvement in a wide variety of social and community settings as well as paid work (Repper and Perkins 2003).

Neighbours also become important attentions in the Muslim society whether they are bound by biological relationship or not. Islam also suggests that Muslims have obligations towards their neighbours. Therefore, members of the society are required to share the emotions, ought to be helpful and share each other's sorrows and happiness. Such ideal concept should bind this kind of society together. These several Prophet's sayings will also apply to any neighbour including those who have people with mental health problems. This concept should also play important role in reducing the stigma about mental problems in the society.

Together, the mosque, the family and neighbours would play a significant role in the process of inclusion. Mosques would function as education institutions for eradicating the stigma, and a place to where people with mental health will find the everyday time to participate in the community events. The family will also become the 'employment' opportunity for them, while neighbours will become the 'peer support'. The employment here means the responsible person in providing basic needs and peer support means the people who will share their feeling while they does or does not experience mental health problems as it should be in the concept of peer support.

CONCLUSION AND RECOMMENDATION

A picture of the macro concept of social inclusion which includes social-economical, social geographic, and have the view of differential concept of society where social inclusion will be implemented. Indonesia, as one of the countries in which Islamic values exist in the society, is also facing problems in dealing with mental health. However, in addressing the problem, several aspects should be taken into considerations are needed such as social structures, cultures and values. Mental health, particularly insanity, is the situation where the obligations required for Muslims are lifted and any actions will not be accountable or regarded as sins. Social inclusion is also able to be implemented with the local consideration. The three places which are Mosque, Family, neighbour, are the reasonable area where people with mental health will experience the appropriate access and support.

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DIFFERENCES IN ORGANIZATION LEARNING (OL), LEARNING ORGANIZATION (LO), AND FASTER LEARNING ORGANIZATION (FLO) ON NURSING SERVICES

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ABSTRACT

Introduction: The management of the organization is required as part of efforts to maintain the existence and continuity of the organization amid the global era and the era of competition. The hospital is one of the important health care network, laden with tasks, burdens, profession, problems and expectations of patients. The complexity of the problem of health care need to be followed by the management of health personnel in it. Hospital as an organization in a competitive era needs to maintain *sustainability* by ensuring that these organizations learn faster (*faster learning*). Building a learning culture within the organization can begin with a true understanding of the organizational learning process and create a learning organization. The purpose of writing this article is to understand the difference between *organizational learning (OL)*, *learning organization (LO)*, and *Faster learning organization (FLO)*. **Method:** The study used 17 Articles that met inclusion criteria. Those Articles retrieved 326 Articles from different databases for example Scince Direct, Google Scholar, Springer Link, Pro Quest, and Ebsco Host using search article strategy approach and different key words, such as knowledge, management, organization, learning, and Faster learning. **Result :** The fundamental difference between OL and OL, LO is that the emphasis on learning processes within the organization, while LO focuses on the condition of the organization as a place for learning. **Discussion:** These can not be separated between the process and the learning *context*. In OL needs to understand knowledge management (KM) and *single-double loop learning*, while at the LO is necessary to understand the organizational conditions for the process of OL and good KM.

Key words: *knowledge, management, organization, learning, and learning faster*

INTRODUCTION

The quality of hospital services can be ascertained from hospital personnel professional appearance, efficiency and effectiveness of services and patient satisfaction. Overall satisfaction is determined by the patient's existing services, including nursing services. Nursing services is a service provided by the science and art simultaneously. Nursing services should be able to improve the health status of clients and helping clients to grow sebagimana healthy humans, it is necessary for a strong basic science and art of nursing performance (Walsh, Vandenbosch, and Boehm, 1989)

Nursing services performed is very important because the nurses as an integral part of health personnel at the hospital, the health personnel at the latest, and most close to the client.

Nursing is a profession with the largest number of groups and played a vital role in the

health care system, so that nurses have an important contribution performance in determining the quality of a hospital (Marquis & Huston, 2000). Hospitals as health care organizations need to take strategic steps to improve service quality and patient satisfaction. Research on *knowledge management, organizational learning* and *performance* has been widely published (Aragon, Jimenez and Valle, 2013; Gorelick and Monsou, 2005). However, research on *Faster learning organization (FLO)* in improving the performance of nurses have not been done. Guns and Anandsen (1996) explains that the *sustainability* of an organization in this competitive era is to make sure that these organizations learn faster (*faster learning*).

Learn faster in an organization or *Faster Learning Organization (FLO)* is a systems approach that focuses on the ability to learn

more quickly and precisely to take action. This is in line with the role and duties of a nurse who should be able to make a decision (*decision making*), fast and precise in providing nursing services

METHOD

This literature review is conducted into Several stages beginning with formulating research question, implementing article search strategy, reviewing Articles, and then writing the results (Joan, 2007).

ARTICLE SEARCH STRATEGY

Based on the above formulation of research questions, researcher conducted article search strategy in Several electronic data bases that are Science Direct, Google Scholar, Springer Link, Pro Quest, and Ebsco Host by writing the keywords *mental health, illness, recovery, models, nursing intervention, developing countries*. Also Researcher keywords combined using Boolean logic is: and or and phrase searching. In addition, restricted Also researcher Articles based on year 2009-2013, and English. Using keywords developing countries, the results Obtained are very limited. Due to the limitation researcher expanded the keyword with the developed countries and high income countries then retrieved 326 articles. The Articles then included into 17 Articles based on inclusion criteria (Denise F Polit and Sally Northam, 2011). To gain an understanding of the recovery models in the recovery model, the researcher Provided the summary of the article.

RESULT AND DISCUSSION

Nursing care has to do with the basic knowledge and art is that deep and

comprehensive to improve the quality of nursing services. Quality of care is necessary to ensure the existence of the hospital as a health care provider organization is able to sustain at competitive era. The nurse as one of the most health workers in hospitals need to have an understanding, awareness and active participation for the realization of quality of service. One of the factors that affect the quality of service is the performance of nurses, which can be enhanced through OL, organizational learning (*learning organization, and knwoledgment management (KM)*) (Brockmand, 2003; Rhodes et al, 2008; Aragon, Jimenez, Valle, 2013). However, understanding about OL, LO, KM, and FLO to health care remains low. Briefly difference between OL, LO, KM and FLO shown in Table 1.

According to the table one simply explained that the difference can be seen from the definition OL and LO. Vera and Crossan (2005) defines that the OL as a process of shared learning activities through submission of thought and action, which is influenced by organizational climate. Instead Senge (1990) defines that the LO as a place where people with continuing to develop the ability of creating results where the thinking patterns expanded and maintained, which aspires freely shared, and people continue sailed to learn. Genc and Iyigun (2011) also explained clearly about the differences between OL and LO. Generally, there are similarities between the OL and LO that is the *knowledge transfer and learning* within the organization to increase organizational performance

Table 1 Differences Organizational Learning (OL), Organizational Learning (LO)

ASPECT	OL	LO
Aim	Build theory (Theory building)	Improve organizational performance (Increasing the organizational performance)
Focus	<i>Organization Process</i>	<i>Organization form</i>
Approach	Deskriptive	Normative
existence	Exists naturally, neutral	Needs activity, preferable
The key question	<i>How does an organizational learn?</i>	<i>How should an organizational learn?</i>
The target group / target	<i>Academics</i>	<i>Practitioners / consultants</i>
Results of the study	<i>Potential behavior change</i>	<i>Existing behavior change</i>
Learning-performance relationship	<i>Positive or negative</i>	<i>Expected to be positive</i>

Learning-related constructs	<i>Knowledge acquisition</i> <i>information distribution</i> <i>information interpretation</i> <i>Organizational memory</i>	<i>system thinking</i> <i>Personal mastery</i> <i>mental models</i> <i>shared vision</i> <i>Team learning (Senge, 2004)</i>
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Source: Modified from Ortenblad, 1995; Koc, 2009; Senge (2004); Vera and Crossan (2005); Genc and Iyigun (2011)

Table 2. Differences between Organizational Learning (LO) and Knowledge Management (KM)

ASPECT	LO	KM
Aim	Increasing the organizational performance	organizational change through improved knowledge
Focus	Organization form	process knowledge
Approach	Normative	set process
existence	Needs activity, preferable	results of knowledge
The key question	How should an organizational learn?	How is the order of process knowledge in the organization?
The target group / target	Practitioners / consultants	Individuals and groups of organizations
Results of the study	Existing behavior change	Changes in the pattern of organization
Learning-performance relationship	Expected to be positive	Positive
Learning-related constructs	1. <i>system thinking</i> 2. <i>Personal mastery</i> 3. <i>mental models</i> 4. <i>shared vision</i> 5. <i>Team learning (Senge, 2004)</i>	1. <i>Acquisition</i> 2. <i>Creation</i> 3. <i>Storage and retrieval</i> 4. <i>Knowledge transfer and utilization</i>

Source: Modified from Ortenblad, 1995; Koc, 2009; Senge (2004); Vera and Crossan (2005); Genc and Iyigun (2011)

DIFERENCES LO AND FLO

Faster Learning Organization (FLO) is a ways more simple, concise, and efficient way to learn more emphasis on opportunities in order to increase continuously. The focus of the learning

organization is completing the job better. Learning is an excellent way to raise the organization's performance in the long term (Guns, B and Anandsen, K, 1996).

Table 3. Difference between Organizational Learning (LO) and Faster Learning Organization (FLO)

ASPECT	LO	FLO
Aim	Increasing the organizational performance	Strategy development of employee capabilities
Focus	Organization form	maintain/ winning the competition
Approach	Normative	Comprehensive
existence	Needs activity, preferable	Participation of all employees / elements of the company
The key question	How should an organizational learn?	How is how to develop the skills of employees in order to win the competition?
The target group / target	Practitioners / consultants	Executives, HR, leaders and members
Results of the study	Existing behavior change	Winning the competition
Learning-performance relationship	Expected to be positive	<i>Positive and long time</i>
Learning-related constructs	system thinking Personal mastery mental models shared vision Team learning (Senge, 2004)	openness to learning challenge of change stimulating leadership. (Guns and Anandsen, 1996).

Source: Modified from Ortenblad, 1995; Koc, 2009; Senge (2004); Vera and Crossan (2005); Genc and Iyigun (2011); and (Guns, B and Anundsens, K, 1996).

According to the table 2 explained that the FLO concept of Bob Guns and Kristina

Anundsans (1996) using a comprehensive approach to improve overall employee started

at executive level to the executive level (*Surge strategy, Cultivate strategy, and Transform strategy*)

CONCLUSION AND RECOMMENDATION

Associated with the process and transformation of *knowledge*, there are linkages between KM with OL and LO is: LO had to do with the mechanism of contextual to transform *external knowledge* to *internal knowledge*, while OL is all about the learning process that transforms the local or *individual knowledge* into *collective knowledge* (Huysman, 2000; Song et al. 2009). The focus of the learning organization in the FLO is to complete the job better. Learning is an excellent way to raise the organization's performance in the long term (Guns, B and Anandsen, K, 1996).

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WHOLE BODY COMFORT SWADD (*BEDONG*, IND.) MODEL FOR BODY TEMPERATURE STABILIZATION AND MOTORIC MOVEMENT STABILIZATION IN LAWANG PUBLIC HEALTH CENTER COVERAGE AREA OF MALANG REGENCY

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ABSTRACT

Background: Swaddling (*Membedong, Ind.*) is a tradition throughout generations since centuries ago that done by Indonesians especially in Java Island. People tend to wrap their baby tightly starting from the shoulders until the feet without any room for movement. One of swaddling model that is useful for body temperature stabilization and does not interfere with baby motoric development is *whole body comfort*. This research aims to know *whole body comfort* model's influence on stabilizing body temperature and developing neonates motoric in Lawang District Public Health Center coverage area of Malang Regency. **Method:** Using a *Quasy experimental* research design. Populations are all 0-28 day-old children as much as 43 children. 32 samples are taken by consecutive sampling technique. **Result:** Based on *independent sample t-test* statistical analysis indicates that there are no differences between control and experimental group's body temperature on intervention-day I and II but just as the opposite, significant differences obtained on day III to IV. Result of *Mann whitey test* shows no significant difference between control and experimental group's coarse motoric movement development on intervention-day I and II while there is one on day III to VII. There are no significant differences between control and experimental group's fine motoric movement on intervention-day I to III while there is on day IV to VII. **Conclusion:** Surely recommended for parents to gently wrap their baby by being not too tight, so that the feet and hands are not squeezed and depressed in clothing. Baby temperature should always be monitored during swadd usage and baby must remain stimulated for coarse and fine motoric development.

Key words: *whole body comfort swaddling, body temperature, baby motoric movement*

INTRODUCTION

Newborn babies experiencing transition from intra to extra uterin in which require special treatment should the babies go through their transition period well. In the uterus, baby remains in warm liquid, dark atmosphere, inhibited, and desolated while been born facing relatively cold outside temperature, therefore baby requires a body wrapper to get as warm as in the uterus, one of several is by swaddling.

Swaddling makes baby feels always cuddled. It acts as reminding of the atmosphere in the womb. Baby would feel comfortable and safe. That is the rationale reason behind swaddling habits. Swaddling benefits baby from adapts the cold outside world by giving warmth and sense of comfort. Unless the swaddling done unrightly, it can interfere with body temperature stability (*overheat*) and

motoric development, even can disrupt the hip bones formation (*dysplasia of the hip*). A study has shown that newborn who routinely swaddled will move rarely, drink milk less-effectively and weight-more than one that does not.

Swaddling is one of independent nursing care in maintaining body temperature stability especially during the transtition period from intra to extra uterin. One of models offered by the researchers is baby wrap model which shaped like baby body, made from soft sweat-absorbing thin cloth along with head cover, motoric movement restrictless and practically used. Researchers gave name of this model a *whole body comfort* swadd. This model can ensure baby will not wrapped too tightly yet still warm because of the ingredients are made from fabrics that is adjustable with baby sizes. This model will not cause baby

experiencing hipertermiaas a result of swaddling too tightly which cuts off air circulation and does not interfering with baby movement apparently because it is adjusting with the form of upper and lower extremities so that baby can move freely. It is also very easy and convenient to use without time-takingunlike its conventional counterparts so anyone can apply it even to newly newborn mothers though.

METHOD

Design used is *Quasy-experimental design: Post test only control group design*. Group of samples are divided into two: experimental and control group. Treatment given is wearing *whole body comfortswadds* to experimental group while conventional swadds weared by control group. Researchers then observe and compare body temperature stability and motoric movement between these two sample group. Material for research are Swadd made of a soft cloth and warm the baby's body shape, absorb sweat, covered head to toe, conventional swadd models (fabric rectangle) which is used by the wider community, and digital timpanic thermometer.

WBC is applied to the treatment group during the first week, while the control group using conventional swaddling in the same timefram. During the intervention and after the intervention ended, researchers measured body temperature and check the baby's motor development. Baby's body temperature is measured three times a day (morning, noon, and night) while the motor development is observed every other day

Parameter for baby's body temperature is read at the tympanic thermometer through the correct measurement procedure, parameter for motorr skill are Motor skills have been achieved by the baby through examination of research or reports from parents. The Inclusion criterias for samples are Born aterm/enough months when delivered, Not being forcibly hospitalized, Using conventional baby wrap, Parents allow their children to be research subjectby signing approval form after getting an explanation (*informed consent*). The Exclusion criterias are Premature infants or Low-weight Newborn, Experiencing trauma during delivery that causes injury

The selected sampling techniques is *Consecutive sampling*. Each neonates that meets the criteria is aresearch subject to a

specific period of time until the number of the desired samples are met.

RESULT

Table 1. Baby Body Temperature of Control and Experimental Groupat Various Measuring Times

Measuring time	Average Body Temperature (°C)	
	Experimental	Controls
Day I	36.6	36.8
Day II	36.3	36.7
Day III	36.8	37.0
Day IV	36.6	37.1
Day V	36.5	36.9
Day VI	36.8	37.0
Day VII	36.4	37.2
Average tota l	36.57	36.96

Table 1 showtThe baby body temperature of control and experimental group in various measuring time after intervention are all in normal range. In control group on day IV and VII tends to rise.

Table 2. The Difference in Neonates Body Temperature Between Group

Body temperature differences between control and experimental group	Sig. (2-tailed)
Day I	.652
Day II	.063
Day III	.000
Day IV	.000
Day V	.000
Day VI	.003
Day VII	.004

Table 2 show that body temperature differences between control and experimentalgroup during the intervention obtained value of $p > 0.05$ in which H_0 is rejected or meaning no significant difference in body temperature control and experimental group on day I and II, while on day III to VII obtained the value of all $p < 0.05$ in which H_0 rejected that means there is a significant difference between body temperature of control and experimentalgroup on day III to VII of WBC wrapsusage.

The majority of experimental group had astounding optimalcourse motoric movement development as much as 14 people (87.5%), while most control group have enough scale of coarse motoric movement

development and less than optimal for each 6 people (35.7%)

It is known that the majority of experimental had astounding optimal fine motoric movement development as much as 10 people (62.5%), while most control group have less on fine motoric movement as many as 6 people (35.7%)

Table 3. Coarse Motoric Movement Differences Between Control and Experimental Group

Coarse Motoric Movement	<i>Mann-whitney test</i> Sig. (2-tailed)
Day I	1.000
Day II	.066
Day III	.000
Day IV	.000
Day V	.000
Day VI	.002
Day VII	.003

The differences between coarse motoric movement development of control and experimental group on intervention-day I and II each gives $p=1.000 > p=0.05$ and $p=0.066 > p=0.05$ in which H_0 accepted so that means no significant difference between behavior response on control and experimental group before the intervention. On day III to VII obtained value $p < 0.05$ each given in order: 0.000, 0.000, 0.000, 0.002 and 0.003 in which H_0 rejected, meaning that there is a significant difference between coarse motoric movement development on control and experimental group.

Table 4. Fine Motoric Movement Differences between Control and Experimental Group

No.	Fine Motoric Movement	<i>Mann-whitney test</i> Sig. (2-tailed)
1.	Day I	.088
2.	Day II	.066
3.	Day III	.054
4.	Day IV	.003
5.	Day V	.005
6.	Day VI	.002
7.	Day VII	.003

The differences in fine motoric movement development between control and experimental group on intervention-day I to III, each shows ($p=0.088$, $p=0.066$, $p=0.054$) $> p=0.05$ in which H_0 accepted that means no significant difference in development of fine

motoric movement between control and experimental group before intervention. On day IV to VII value obtained $p < 0.05$ are given in a row 0.033, 0.005, 0.002 and 0.003 in which H_0 rejected that means there is a significant difference between fine motoric movement in control and experimental group.

STATISTICAL ANALYSIS

Independent data analysis used to understand the difference on body temperature between control and experimental group of samples by conducting *Independent t-test* analysis if data distributed normally, yet if not one researchers using *Mann-whitney test*. *Mann-whitney test* is also used to know the difference on motoric movement between control and experimental group. The specified error level of 5 percent is set ($\alpha=0.05$).

DISCUSSION

Newborn baby tends to stress quickly due to environmental temperature changes, because of unable to regulate their own body temperature. Newborn baby can experience heat loss through four mechanisms namely: convection, radiation, conduction, and evaporation. Also suffers a quick temperature rising due to sudden environmental temperature changes or incorrect baby treatment.

Swaddling phenomenon in society comes in form of 24 hours-a day swaddling without loosening, wrapping so tightly that starts from the shoulders until the feet with both hands restrained inside, and wrapping regardless of the material used for wrapping. In addition, many parents do not pay attention towards baby's body temperature changes during swaddling or they do not know that the wrong technique in wrapping can increase the body temperature.

Results of the study showed that average body temperature on experimental group are all within normal range while on control group tend to high on certain days. WBC allows air circulation to get into and out of wrappings optimal because it is designed in such way that it does not interfere with air streamways. Based on attachment 1 (data tabulation) it is known that temperature changes on control and experimental group does not get within extreme ranges and hold still in the normal range of $36^{\circ}\text{C} - 37^{\circ}\text{C}$. The neonates body temperature influenced by some

variable which among others are: the temperature of the environment, health status, hydration status, thermoregulation stability, *Base Metabolism Rate* (BMR), and the media that is attached to the body of the baby.

Researchers obtained some observation-based facts related to conventional baby wraps. Mother thinks that by swaddling securely, the baby will be calm and milk more. Most of the mother (11 persons) wraps her baby with a rectangular cloth folded in such a way that can bind the body from the shoulders to the feet. The baby worn vests, clothes, and then baby wrapped on the outside so that practically, there are 3 layers of cloth that bind the body of the baby. With this treatment, it can be assured that the air circulation is not good. Baby's body heat could not out optimally get loss so that there is a high risk with baby experiencing hipertermia. Mother never consider about body temperature changes that happen to her baby because they do not understand dangerous body temperature rising could be happened from wrong swaddling technique. Assuming this heat is mundane things happen on the baby and later will be down by itself. This perception can be harmful to the baby because increasing temperature that occurs continuously without coupled with addition of a good fluid intake can lead to dehydration and resulting in death.

The results of this research is in line with research explored in journal pediatrics AAPS swaddling is influential/related to: *Sleep and Arousal, Temperature Control, Motor Development, Sudden Infants Death Syndrome, Respiratory Management, Rickets and D* (development dysplasia of the hip), *Pain Control, Crying Behavior, Breastfeeding and Postnatal Weight*.

Observation during research proof that experimental group coarse motoric movement is more active compared to control group. This can be seen clearly when they remove the wrap show different upper and lower muscles and limbs movements of the baby are better in experimental group than control group. During the swaddling usage, experimental group can still free to pan the hands and feet in a flexible manner whereas control group can not. When WBC is removed from the baby of experimental group, immediately baby appears to be actively moving an intense urge both the top and bottom limbs. On control group when

conventional baby wrap is removed, still take some time to be able to move actively on both limbs. Even some of the newborns start being active when there is an intense cold stimuli during washed. This phenomenon clearly indicates that baby who was given the opportunity to pan mobile body parts will reach motoric development more optimally than ones who always collared.

Also merely, more reflect that normally can be seen clearly on the 0-1 month-aged children is clearly identified on the experimental group while on control group is dimly visible, means the reflex exists but not too strong. Balanced movement can be seen from mobile body parts, i.e. the hands and feet. When the baby is surprised the hands and feet that previously was in bending position like frogs, experience an extension and become straight simultaneously.

The group who use WBC has better sensitivity than the group who use conventional baby wraps. This is shown by the existence of a better handheld reflex on experimental group. Speaking theory, 0-3 month-aged baby already have grasped reflex when given an object or given pressure on hands. When researchers draw an object into the baby hands, they quickly grasped objects of alleged price compared with control group that require a longer time to be grasped. The difference is caused by control group tends more openly to things come in contact with their own body. The WBC group are more flexible because their limbs are not wrapped tightly. Baby wrap cause nerves untrained to receive stimuli from outside in form of physical contact or touch, including with his mother self.

According to Jane Munro from the Royal College of Midwives, many joints at the feet of the baby must be moved so that they become no rigid and experience growth. There is a large movement, signs of active baby. Straightening baby feet by swaddling is an offense act towards the nature. Inside the womb, baby's feet are bended, also the hands. The hip becomes displaced so unable to walk. That is what happened instead of bent. However, baby wrap still can be done to give a sense of warm without needs to straighten the baby feet deliberately moreover tighten with fabrics. Let the baby feet move as they wish.

The experts suggested to let the baby hands moves freely and make sure the neck

can still looked to left and right. With this proposal, baby wrap would seem like shower wraps (kemben, *Ind.*) that started from the baby's chest. Meanwhile for the legs, need to be very careful not to force straighten. Infants need free space to move, because the ability of motoric movement developed continuously over time. I only swaddle my baby on the first week after he was born and then I never do so again. Swaddling causes blood circulation disturbed because tight baby wrap can press blood vessels that normally should be able to flow with ease. According to Professor Nicholas Clarke, The danger of tight swaddling is damaging baby hip, including causes temperature to rise and inhibits the growth. Meanwhile Jane Munro from the Royal College of midwives said, "There is a concern about the increased use of baby wrap on the baby.

On intervention-day I and II, control and experimental group does not show the difference between the body temperatures, means this is because most of the baby is still in the transition period from the intra to extra uterin. Baby needs warm atmosphere like inside the womb so that feels restrained and limits motoric movement less-optimal. On day III to VII, naturally baby will move actively so that they require more space and mobility. At the same time if the baby is being wrapped incorrectly, then the baby does not have a wide opportunity to develop motoric movements. The baby with WBC is more active compared to the baby using conventional baby wrap especially ones that use incorrect wrap technique so that the baby is difficult to move and develop motoric movements.

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LESSON LEARN MOTHERS SOCIAL SUPPORT DECREASE ADOLESCENTS ANXIETY TO CONFRONT MENSTRUATION

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ABSTRACT

Introduction: Anxiety is an unpleasant feeling or sense of uncertainty felt by someone. Adolescents who experience anxiety can be caused by menstruation, especially at the early menarche age of 1-3. Untreated Anxiety can interfere adolescent's study. This study aim to investigate the relationship between mother's social support with adolescent's anxiety in confronting menstruation. **Method:** this study was a descriptive analytical with cross sectional approach. The population was student in 6th grade in SDN Panjang Jiwo 1 Surabaya. The 26 sample respondents were chosen by purposive sampling technique. The independent variable in this study was mother's social support. The dependent variable was adolescent's anxiety. The data was collected using questionnaire and analyzed using Spearman rho test with a degree of significance $p \leq 0,05$. **Result:** Most adolescent students experiencing mild anxiety (65,3%), though there were experiencing moderate anxiety (34,7%). The correlation between perceived susceptibility $p = 0,034$ with significant $r = -0,418$. **Discussion:** Mother's social support was strong enough towards adolescent's anxiety in confronting menstruation. Further research was suggested to involve mother as a respondent to decrease adolescent's anxiety to confront menstruation.

Keywords: mother's social support, adolescent's anxiety, menstruation

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood which is marked by menarche and physical changes that occur dramatically. Fast wide physical changes can simultaneously occur with the emotional upheaval and psychological growth of adolescents. This can lead to feelings of confusion, questions, fears and anxiety (Proverawati, 2009). A serious problem may appear when entering a new period. At this period, an adolescent often experiences anxiety about how to cope with the changes that happen to her. Anxiety that experienced by young women often occurs in the face of menstruation, especially for those who are still in the beginning of the menstrual cycle (1-3 years post-menarche) that occurs due to hormonal factors (Golchin et al, 2012). Menstruation is a puberty aspect that affects the quality and convenience in education more than any other puberty aspects (UNESCO, 2014). Most people think that menstrual cycle that happens on teenagers is common. In fact, this point is a critical time for young people in puberty (Sommer, Sutherland, & Chandra-

Mouli, 2015). According to Isaacs (2004) the symptoms of anxiety are excessive worry, restlessness, tension, fatigue, difficulty concentrating, tension and sleep disorders. An adolescent who experiences menstrual cycle require mental alertness, which is good, because it could be something new for her (Ni'mah, 2014). Physical changes that drastically happen to her cause great concern upon an adolescent (Potter & Perry, 2009). Although they have received some information about the previous menstrual period, yet this is something to worry about, because it is the first experience. This condition will cause anxiety, and it often grows belief that menstruation is something unpleasant or serious, resulting develop negative attitudes during period and see it as a disease (Llewellyn-Jones, 2005). One way that can be done to reduce the anxiety of adolescents is the provision of social support from loved ones especially mothers (Moloney, 2008). The preliminary data obtained 65% of students at SDN Panjang Jiwo 1 stated that they knew menstruation for first time from the mass media, especially TV and also from friends, teachers. Mothers just explained what

menstruation was when the children had their first period. The social support, on confronting the menstruation, given by mothers towards their daughters is still unclear.

Data obtained from Riskesdas (2010) showed that the teenagers who had their first period were 37.5% over age 13-14; 19.8% over age 15-16; 4.5% over age 17 and older; and 0.1% over age 6-8. The early menstrual age in developing countries, including Indonesia, are currently experiencing a shift from the early age of 16-17 to 12-13 (Rasjidi, 2010). Sasongko research (2009) states that over 60 student respondents (18.33%) experienced mild anxiety level, 55% of them had moderate level of anxiety, and 26.67% of them experienced severe level of anxiety dealing with menarche. Anxiety can occur to all adolescents, including teenagers at SDN Panjang Jiwo 1 Surabaya. Based on a preliminary study, it was found that 72.97% of 37 students of sixth grade had already been menstruating. Distributed questionnaires, towards 11-13 year old students, obtained 11 students had anxiety. The students started menarche at the age of 10 (5%), 11 (60%), and 12 (35%). 60% of them expressed concern dealing with menstruation and 75% of them said that new information about menstrual cycle was given by their mother after their first period.

Factors that influence adolescent readiness dealing with menstruation are age, resources, and attitudes of young people themselves (Jayanti & Purwanti, 2012). Natural shift commonly happens among menarche adolescents from ages 16-17 to 12 or even 10, which is considered to be entering adolescence and ready to face the world of adults, but teenagers are not ready to face the reality or turning into adults with an offset against their psychological development (Solihah, 2013). Education about reproductive health, especially about menstruation is rarely discussed at schools and in the family as well as the unavailability of health education at schools, the media or the family that may trigger anxiety among adolescents (Golchin et al, 2012).

According to a teacher at SDN Panjang Jiwo 1, education of reproductive health during menstruation has not been given, but learning about the basic theory of menstruation such as what menstruation means and how the occurrence of menstruation was given to grade 6 students through religious studies and science studies. Schools never received counseling

about menstruation and other reproductive health. Gulhin et al (2012) in Iran was found that most of the teenagers there feel anxious and embarrassed about the appearance of physical and psychological changes during puberty. Actually, anxiety normally happens and it's depressing and short (Ramaiah, 2003). However, if anxiety isn't well untreated, it could rise up feelings of inferiority or make them feel that they will get sick during menstruation so that they do not dare to leave the house and get compassion from many people. Based on that experience, adolescents use menstruation as a defense mechanism in order to be free from assignments or avoid school (Kartono, 2006).

Menarche is an important event in the lives of adolescents, as a marker of fertility and one of the signs for a teenager has entered puberty. Teens that will experience first menstrual period (menarche) require a good mental preparedness (Nagar & Aimol, 2010). Teens need to make adjustments that require support from the family within. Family is the early socialized organization region for teenagers. In family teens can get warmth and behavioral guidance in order to grow in line with expectations (Windyarini, 2009). 75.58% of adolescents in India have discussed menstrual problems with someone and 38.15% of them talk with their mother (Dambhare et al, 2012). Adolescents begin to recognize various sexual processes that happen to her body, first time through their mother (Sarwono, 2008). Generally girls will tell her first menstrual period (Santrock, 2003). Green theory reveals a person's health is influenced by behavioral factors that are formed by predisposition factors, enabling factors and driving forces. Mothers' social support is the driving factor which will provide great comfort, effectiveness and openness towards children so that the children can tell the problem and lament that drops the anxiety feelings (Beadle & Cahill, 2013).

METHOD

The design used in this research is quantitative and descriptive research using cross sectional method. The population in this study was all 37 students grade VI SDN Panjang Jiwo 1, year 2015/2016. Sampling was done by *nonprobability sampling* technique with *purposive sampling* type. Number of samples in the study specified in inclusion

criteria and exclusion criteria (Nursalam, 2013). Inclusion criteria in this study are: Students who have already been experiencing menarche (within 1-2 years of menstruation) and students

The independent variable (independent) in this study is mother's the social support while the dependent variable (dependent) in this study is the teenage anxiety. A tool for knowledge and attitudes, in the form of questionnaires, is filled out in about 30 minutes. The collected data were then analyzed using the Spearman rho test with significance level <0.05 with a correlation of $r = -0.418$. The p-value less than 0.05 then H_0 and H_1 accepted, it indicates that there is quite strong relationship between mother's social support towards anxious teenage dealing with menstruation.

RESULT

After analyzing the data and testing the results of quantitative research (with Spearman's rho), it is resulted that there is a relationship between mothers' social support and teenagers' anxiety dealing with menstruation, with the following results.

Based on age, it can be explained by the characteristics of the respondent are likely 16 students (34.6%) of age 12. 11 year old six graders, that experienced period, are 14 students (53.8%). High school graduates

aged 10-14. The exclusion criteria of this study are the students who were unable to attend at the time of data retrieval and who were sick.

mothers are 14 people (53.8%). There are only 6 students (23.1%) that have sisters.

Based on the results of statistical analysis using Spearman rho correlation test with a correlation of $r = -0.418$, it can be gained a reversible value which means the higher support given by mothers, the lower teens anxiety will be and the value $p = 0.034$. The p-value is less than 0.05 showing that H_1 is accepted and H_0 is rejected, it indicates that there is a strong relationship between social support given by mothers towards adolescents anxiety to confront menstruation.

DISCUSSION

The distribution number of respondents by highest level of anxiety was resulted 17 students (65.4%) experienced mild anxiety, 9 students (34.6%) experienced moderate anxiety but there were no students who experienced severe anxiety. There were 10 students respondents (58.8%) aged 12 and 7 students (41.2%) aged 13. There were 8 student respondents (47.1%) that averagely started menstruation at age of 12.

Table 1. Common characteristics respondent

No	Charakteristic of Respondents	Paramete	f	%
1.	Age	11 years	1	3,8
		12 years	16	61,5
		13 years	9	34,6
2.	Menarche	10 years	2	7,7
		11 years	14	53,8
		12 years	9	34,6
3.	Education of mothers	13 years	1	3,8
		College	5	19,2
		Senior high school	14	53,8
		Junior high school	5	19,2
4.	Older sister	Elementary school	2	7,7
		There is	6	23,1
		There is no	20	76,9
		Total Respondents	26	100

Table 2. Mothers' social support towards adolescents anxiety to confront menstruation

Mothers social support	Adolecents Anciety				Total	
	Mild		Moderate		Σ	%
	f	%	f	%		
Good	9	34,6	1	3,9	10	38,5
Sufficient	3	11,5	2	7,7	5	19,2
Less	5	19,2	6	23,1	11	42,3
Total	17	65,3	9	34,7	26	100

Spearman Rho $r = -0,418$ $p = 0,034$

Teens that are at the age of 10-14 years entered their early teenage and experienced fluctuate changes upon their psychological health (Potter & Perry, 2009).

Anxiety is defined as a certain experience describing unpleasant feelings (Harini, 2013). One of the factors that can cause anxiety is the age and knowledge (Hurlock, 1998). Early age teens would be more likely to experience anxiety as they enter the age of transition from the age of children to teenagers. At this time they are still in the process of searching for identity and better thought processes. Sixth graders at SDN Panjang Jiwo 1 Surabaya have got some information about menstruation from classroom teachers and religious teachers about what menstruation is and how it could happen. Education about menstruation that has been received by the respondents could reduce anxiety they experience. This could also be a reason of why there weren't respondents who experienced severe anxiety.

There were 6 students respondents, at the age 11 in average, experienced moderate period anxiety. Another factor that can cause anxiety is an experience (Hurlock, 1998). Respondent number 21 experienced menstruation for the first time and did not have a sister. Anxiety is possibly happening because it's her first experience which causes higher anxiety than a person with no absolute experience. In addition, respondents do not have a sister as a support system which can possibly reduce the anxiety they feel.

The level of social support given by mothers towards 26 teenage students at SDN Panjang Jiwo 1 Surabaya is various. There were 11 students (42.3%) received less support, 10 students (38.5%) received good social support, 5 students (19, 2%) received sufficient support. Social support; in the form of materials, information, and emotion; is useful for improving someone's physical and psychological state (Widhaninggar, 2010). According to Potter and Perry (2009), at the early adolescence term, teens still have a strong desire to rely on parents and at the same time trying to be independent. The result showed that the level of social support that teenagers received was in an insufficient rate. Mothers should be emotionally supportive

and knowledgeable about menstruation (Gilloly 1998; Rierdan et al, 1983 in White, 2013). Factor that influences the provision of social support is education (Triyanto & Iskandar, 2014). Respondent number 7 and 13 got less support from the mothers who are only elementary graduates. On the other hand, respondent numbers 1 and 17 got good supports from the mothers who are university graduates. The education level a mother can affect the support given. The higher level knowledge someone has, the higher level of understanding and comprehension they will have. In other words, mothers with good knowledge about someone's condition during menstruation would be able to help themselves providing the support that their teenage daughters need.

Types of social support according to Wills and Ainette (Baum et al, 2012) are divided into four. They are emotional support, appreciation, instrumental, and information. In Table 5.4 shows the percentage of supports that respondents got. There were 13 students (50%) got emotional support, 10 students (38.5%) got information support, 2 students (7.7%) got appreciation support and 1 student (3.8%) got instrumental support. Support is needed by every individual and is different depending on the needs (Sarafino & Smith, 2013). According to Catur and friends (2009), social support is not only about providing assistance, but also the important thing is how the receiver has a correct perception to catch the meaning of that assistance. It also allows teens to feel the informational and emotional support more because they are more likely to feel the benefits of assistance towards them. At the first time of sensing changes on them, they will have a lot of questions upon themselves why such things could happen. At that point, teenagers desperately need the right information about what is happening to them, despite the fact that they also get instrumental appreciation and support.

The results show that there is a relationship between social support from mothers toward teenage anxiety to confront menstruation, which is shown by statistical analysis test to the value of $r = -0.418$ and $p = 0.034$. A p value <0.05 indicates a significant relationship and coefficient (r) - 0.418. It means

there is a quite strong level of relationship, with the negative correlation direction, between social support from mothers and adolescents' anxiety to confront menstruation, which means the better the support provided, the lower level of anxiety they felt. This is in line with the theory of Green (1991) which states that social support is one of the supporting factors or reinforcing factors that have a relationship with a person's behavior in this case the teenage anxiety. Supports provided by mother will provide comfort and openness to the children so that the children can tell the problem and lament that can reduce children's anxiety (Beadle & Cahill, 2013).

Cross tabulation on Table 5 shows that most support, which 11 students at SDN Panjang Jiwo 1 Surabaya got, was insufficient support. There were 5 students (42.3%) with (19.2%) mild anxiety and 6 students (23.1%) with moderate anxiety. Respondents who experienced mild anxiety can be affected by several factors such as age, environment, experience, and other support systems (Hurlock, 1998). Numbers 11 and 23, each has an older sister who could become one of the sources of support. Their sisters can probably help teenagers to obtain information through their sisters' experience which makes the anxiety is in mild level despite insufficient supports from the mothers. Respondent numbers 12, 13, and 25 are 12 years old and 53.8% teenagers, at the age of 11 in average, has experienced menarche so that teens can get information or other support system from their peers which makes the anxiety is in low levels despite insufficient support from the mothers. There are 13 mothers elementary graduate. According to Triyanto and Iskandar (2014), it showed that the level of education or knowledge can affect the level of social support provided. Level of education affects mothers' knowledge. The higher the mother's education, the more detail information they can provide and tell what happened to their children so that mothers are able to provide appropriate support for their daughters.

The results showed that there were 10 students (38.5%) received good support with 9 students (34.6%) experienced mild anxiety and 1 students (3.9%) experienced moderate anxiety. In accordance with the statistical test, good support was supposed to make respondents tend

to feel low anxiety in range, but still there was one respondent who experienced anxiety and it was the number 4. It made her still feel the anxiety even though she was getting good support from the mother. Someone with the first experience of menstruation is still trying figure out problems they have. At their first experience, they may have not clearly found a way to resolve the problems therefore on their further experience teens still feel anxiety.

The most support value percentage is sufficient support, with five students (19.2%) got it. Three students (11.5%) experienced mild anxiety. Number 19 is probably influenced by another support source; the respondent has 2 older sisters. The more people can support, the easier the individuals can resolve the problems (Taylor, 1991). The mother's support, which within the range, was sufficient enough but the teenager could still reduce her anxiety because she can learn from the information or experiences faced by her both sisters. The two student respondents (7.7%) with moderate anxiety, they are number 2 and 6, got sufficient support. Someone with younger age is more easily disrupted by anxiety than someone's older (Varcoralis, 2000). Respondent number 2 was possibly affected by the younger menarche age compared with the other friends' age so that she still felt anxious. In addition, she is the first daughter in the family so that there is no place to exchange experiences.

CONCLUSION

Based on the results of research conducted, it can be concluded as follows: 1) Anxiety teenagers, who face menstrual cycle, of 6th grade at SDN Panjang Jiwo 1 Surabaya were mostly experiencing mild anxiety; 2) Social support given by the mothers towards the teenagers is not absolutely able to decrease the level of anxiety. It really depends on each individual's perception of themselves and the social support perceived by teenagers mostly in a good level; 3) The better the social support from the mothers, the lower level anxiety felt by teenagers on confronting menstruation.

CONCLUSION AND RECOMMENDATION

It was a kind of consideration for the school to give deeper reproductive health

information for students, as early knowledge for adolescents, which can support the provision of mothers' social support at SDN Panjang Jiwo 1 Surabaya. For health workers, especially nurses need to improve the mothers' knowledge on how to deal with teenagers who menstruate. Further research is required to conduct deeper research using qualitative techniques such as; interviews or observations by investigators directly or other techniques besides questionnaire to both adolescents and mothers in order to obtain more complete data regarding mothers' social support towards adolescents' anxiety to confront menstruation.

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EFFECT OF MUSIC THERAPY ON PAIN, ANXIETY AND CORTISOL LEVEL IN PRIMIGRAVIDA DURING ACTIVE PHASE BASED ON KOLCABA'S THEORY

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ABSTRACT

Background: Labor pain and anxiety are closely interrelated with each other. Pain and anxiety together can increase level of cortisol, may result in a decrease uterine contractions so that the risk of causing prolonged labor. The purpose of this study were to examine the effect of music therapy in pain, anxiety, and cortisol level in primigravida during active phase of first stage labor. **Method:** This study was an experimental research approach with pre-test post-test design at Delivery room Puskesmas Jagir Surabaya. Research subjects of this study was recruited using simple random sampling who was included inclusion criterias. Research subjects in this study was of 32 people who were then divided into two groups, 16 mothers into intervention group and 16 mothers into control group. Data were collected by using observation with VAS and VAAPS, also took venous blood sampling for laboratory test of cortisol serum. Data were analyzed by using paired t-test and independent t-test. **Result:** The results showed that: 1) Score of VAS in intervention group was less than control group ($p=0,000$), 2) Score of VAAPS in intervention group was less than control group ($p=0,000$), 3) There was no significant differences cortisol level between intervention group and control group ($p=0,305$). **Discussion:** Music therapy could reduce pain and anxiety, but could not reduce level of cortisol in primigravida during active phase of first stage labor. Further research, music therapy should be given since the beginning of third trimester so that primigravida more prepared for childbirth.

Keywords: *labor, pain, anxiety, cortisol, music therapy*

INTRODUCTION

The delivery process often cause discomfort or pain. Labor pain in the first stage or when first-epoch is felt during uterine contractions which cause dilation and thinning of the cervix and uterine ischemia due to contraction of the myometrium (Hughes, 1992 in Bobak, 2005). Primiparous experience pain longer than multiparous mother for the duration of the first stage of a longer primiparas is 13-14 hours, while multiparas about 7 hours (Wiknjosastro, 2006). Labor pain that lasts longer at risk of maternal emotional fatigue that affects among others, tension, anxious, and fearful. (Mozurkewich et al, 2000, in Hosseini et al, 2013). Problems with labor pain is still not getting the attention of health workers, especially nurses and midwives. Results of a preliminary study conducted by researchers at the Puskesmas Jagir Surabaya there is no SOP yet to address

labor pain, during this midwife only teaches relaxation breath in and was considered still not optimal. Pain management is absolutely necessary in order to make the mother feel comfortable during labor, but in reality there is no labor pain management in Indonesia. Puskesmas as health care center level 1 expected to cope with labor pain that is accompanied by anxiety so that she can live a normal delivery. Several non-pharmacological alternative methods that can be used to reduce labor pain and anxiety are acupuncture, breathing techniques, acupressure, touch, water therapy, massage, and music (Taghinejad et al, 2010). Music therapy offers a method of distraction that is proven to reduce pain and improve the state of deep relaxation that can distract the mother of pain during childbirth (Martini, 2011). Until now, the effect of music therapy on pain, anxiety and cortisol levels in the first stage of labor primigravidas active

phase based Kolcaba theory can not be explained.

Oktavia study (2013) showed that 90% of maternal experiencing severe labor pain and 10% had labor pain severe or very severe. Primiparous mothers tend to experience labor pains are more severe than multiparous mothers. Approximately 85-95% of maternal report severe pain during the first stage of labor (Tournaire 2007 in Harahap, 2009).

One form of delivery method non-pharmacological pain relief is music therapy. Easy birthing music helps the brain to release endorphins that can reduce pain during childbirth incorporating quantum mind programming methods to help birth mothers give birth to relax and minimize the pain during labor (Erwin, 2011). Music therapy is given to stimulate the theta brain waves is able to balance other brain waves. The theta brain waves can stimulate the release of endorphins. The release of endorphins will make a maternity body to relax so would hamper Hypothalamic-Pituitary-Adrenal Axis (HPA Axis). Hypothalamic CRF lower expenditures that will affect the pituitary gland to reduce secretion of ACTH. The decrease ACTH secretion may affect the adrenal cortex to inhibit the secretion of cortisol and other stress hormones (Ventura, 2011)

METHOD

This research is an experimental study with the approach of the pre-test and post-test group design. Research conducted in the Delivery Room Puskesmas Jagir Surabaya during the months of April-May 2015. Subjects in this study were primigravida met the inclusion criteria, namely primigravid inpartu entering the active phase (opening > 4), ages 20-35, scheduled for vaginal delivery, single fetus, life, cephalic presentation, pregnant women at low risk according to the Puji Rochjati score card, Javanese, minimal education junior, did not have a hearing loss, willing to study and signed an informed consent, are not experienced family violence, disasters. Exclusion criteria in this study were primigravida inpartu who received spinal anesthesia/epidural or pain-lowering medications, requiring induction of labor since

the latent phase, and place of residence near the airport, stations and terminals. The process of taking the research subjects in the present study using simple random sampling.

Samples (research subjects) in this study amounted to 32 people who were then divided into two groups, 16 of the intervention group and 16 control group. Observation of pain using the Visual Analogue Scale (VAS), anxiety using the Visual Analog Scale of Pain Anxiety (VAAPS), while the measurement of cortisol serum levels using ECLIA.

Primary data on the number of pregnant women who had antenatal care (ANC) adapted to schedule pregnant woman during ANC is every Wednesday and Thursday. After getting the number of potential birth mothers, researchers took 32 samples randomly shuffled (randomized) to be formed into two groups: the intervention group and the control group. When that came out at odd count (first, third, and so on.) For the intervention group and the even-numbered (second, fourth, and so on.) For the control group. In the intervention group, if the mother is willing to become respondents, the birth mothers will be given tester birthing easy music first. After the birth mothers agree with the music that will be given then he defined as research subjects for the intervention group and signed informed consent. Before being given music therapy, both groups performed the pre-test, observation by VAS pain and anxiety VAAPS. At the time when I entered the active phase (opening 4-7 cm) in the intervention group music therapy given for 3 hours with a 10 minute break every hour, whereas in the group controls of getting action according to SOP health center in the form of deep breathing relaxation. Evaluation (post test) pain, anxiety, and cortisol serum levels performed in both groups (intervention group and the control group) after 3 hours after entering the active phase of the first stage by the observer midwives in the delivery room (single-blinded).

The statistical test used in this study were paired t-test to analyze maternal pain and anxiety, and test independent t-test to analyze the levels of cortisol serum.

RESULT

Data frequency characteristics of the study subjects are distributed in the following table:

Table 1. Distribution characteristics of research subjects

Characteristics of research subjects	Intervention Group		Control Group	
	F	%	F	%
Ages	16	100	16	100
20-24 years	8	50	7	43,5
25-29 years	7	43,5	7	43,5
30-34 years	1	6,3	2	12,5
Education	16	100	16	100
High School	11	68,8	12	75
Diploma/Bachelor	5	31,3	4	25
Occupation	16	100	16	100
Housewife	11	68,8	9	56,3
Private	4	25	7	43,8
Business	1	6,3	0	0

Table 2. VAS and VAS difference score in the intervention group and the control group

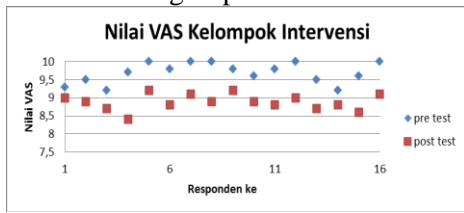
	Pre test			Post test	
Intervensi	VAS	(9,6875±0,28723)	P = 0,000	VAS	(8,8813±0,21975)
	VAAPS	(9,4188±0,39870)		P = 0,024	VAAPS
Kontrol	VAS	(9,7313±0,27981)	P = 0,000	VAS	(9,5688±0,29148)
	VAAPS	(9,2563±0,44116)		P = 0,046	VAAPS

Table 2 shows that there are significant differences in the average difference in VAS values in each intervention group ($p = 0.000$ or $p < 0.05$) and the control group ($p = 0.024$ or $p < 0.05$). Both groups showed no significant differences, but there are differences between the mean in each group. In the intervention group who received music therapy is the average difference is quite large (mean \pm SD = 0.80625 ± 0.27195), whereas in the control group (mean \pm SD = 0.16250 ± 0.25788). It showed that the intervention group decreased VAS scale larger than the control group.

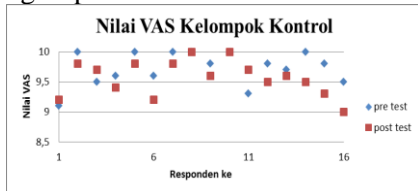
Table 1 also shows the scale VAAPS in the intervention group and the control group showed a significant difference, namely in the

intervention group ($p = 0.000$ or $p < 0.05$) and in the control group ($p = 0.046$ or $p < 0.05$). Although the results of statistical calculations showed significantly different in the two groups, but there are differences between the mean difference in value VAAPS in the intervention group and the control group. The intervention group showed greater mean difference (mean \pm SD = 0.88750 ± 0.27295) than the control group (mean \pm SD = 0.15000 ± 0.27568). This shows a decrease in scale VAAPS greater in the intervention group than the control group. VAAPS VAS scale distribution and pre-test and post-test in the intervention group and the control group shown in Pictures 1, 2, 3, 4, 5, 6, 7, 8 below:

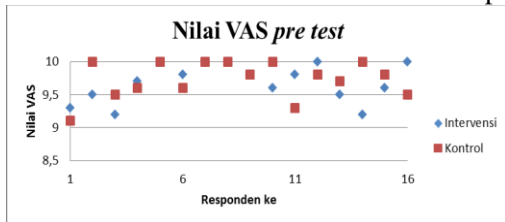
Picture 1. VAS scale distribution of the intervention group



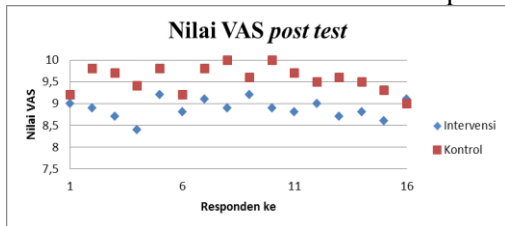
Picture 2. VAS scale distribution of control group



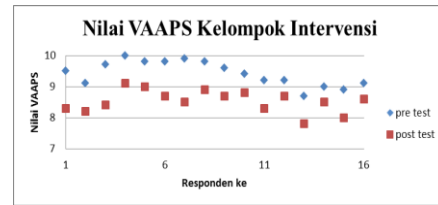
Picture 3. Distribution of VAS scale of pre-test



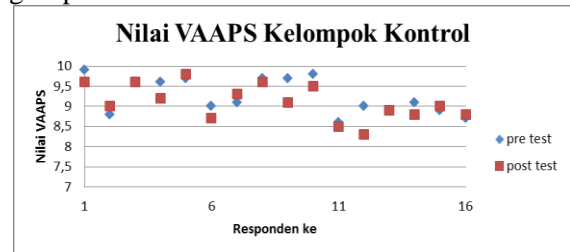
Picture 4. VAS scale distribution of post test



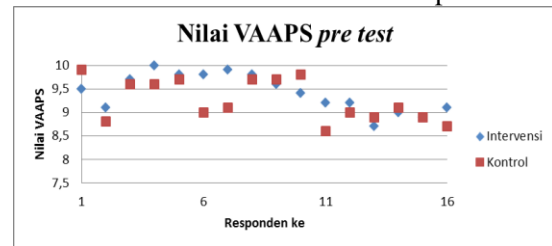
Picture 5. VAS scale distribution of the intervention group



Picture 6. VAS scale distribution of control group



Picture 7. VAS scale distribution of pre test



Picture 8. VAS scale distribution of post test

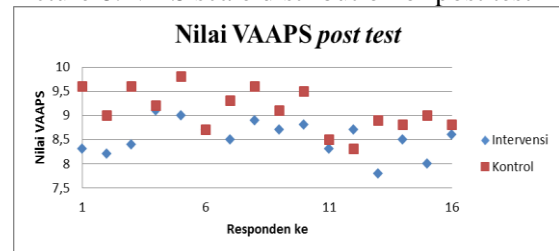


Table 3. Differences in cortisol serum levels in the intervention group and the control group

Group	n	Cortisol Serum Levels		P
		Mean	Standard Deviation	
Intervention	8	463,9500	66,90669	0,305
Control	8	502,3750	77,16087	

Picture 9. Distribution of cortisol serum levels of post test

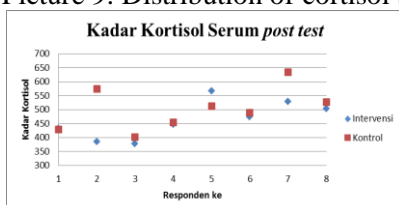


Table 3 shows that there was no significant difference in the intervention group and the control group ($p = 0,305$ or $p > 0.05$). This shows that music therapy is given for 3 hours while the active phase had no effect on maternal cortisol levels decrease, but there are differences between the mean in the intervention group (mean \pm SD = 463.9500 ± 66.90669) and the control group (mean \pm SD = $\pm 502.3750 77.16087$). The mean difference indicates that cortisol levels are lower in the intervention group than the control group. Figure 9 showed no significant differences in serum cortisol levels between the intervention group and the control group.

DISCUSSION

Based on Figure 3 shows that the VAS scale research subjects were in the range 9-10 scale. This may imply all pregnant women can not control labor pain well. Suspected labor pains caused by ischemic muscle of the uterus, pelvic floor muscles and the perineum. With increasing both the volume and frequency of the uterus, the pain that will be felt stronger, peak pain occurs in the active phase (Reeder et al, 2012). Research Oktavia (2013) proved that 90% of maternal experiencing severe labor pain and 10% had labor pain severe or very severe. Primiparous mothers tend to experience labor pains are more severe than multiparous mothers. Approximately 85-95% of maternal report severe pain during the first stage of labor (Tournaire 2007 in Harahap, 2009).

In figure 7 shows VAAPS scale study subjects were in the range of 8-10 scale. It is caused by several factors such as parity. All the subjects of this study were mothers primiparous process effacement in primiparous usually occurs earlier than cervical dilatation. This process causes the intensity of the contractions felt heavier than multipara primipara, especially in the first stage of labor (Sherwen et al, 1999). Primiparas tend not to adapt to the pain of childbirth compared multiparas. This causes primiparas can not tolerate labor pain causing anxiety. Anxiety and fear lead to increased muscle tension and disruption of blood flow to the brain and muscles. This causes tension in the muscles of the pelvic, uterine contractions are impaired, the loss of the driving force of the mother during the second stage of labor. Old tensions will lead to fatigue in the mother and increase

the perception of pain and prevent mother to control the pain (Martini, 2011).

Convenience according Kolcaba (2003) includes physical comfort, psychospiritual, social and environmental. These four components are interconnected to one another. First stage of labor is a condition that is filled with stressors, fear, and intermittent pain in a long time. It can interfere and psychic physical comfort. Music therapy is one way to reduce pain and anxiety and provide comfort, make a person relax. Music of easy birthing is one of music therapy where this music has a slow rhythm and low frequency. This music is the instrumental music accompanied by sounds of nature like water gurgling sound so impressed soothing music. Entire mothers who become subjects of this research enjoy music easy birthing yng given. The results of interviews with several researchers showed research subjects them music menikmti given because of her voice soothing and can make them relax. Research from Martini (2011) proved that music easy birthing can reduce pain and blood pressure, as well as increase endorphin levels in the blood. Measurement of maternal labor pain with a VAS scale after birthing easy music therapy for 3 hours, according to figures 1 and 4, showed that study subjects pain after getting music therapy decreased the VAS scale. Decrease in VAS scale in the study subjects did not use the category of pain (pain mild, moderate, severe, and severe) due to a decrease in VAS scale only slightly and most of the study subjects were still in the same level with the pain before music therapy. The test results of analysis by paired t-test showed that the intervention group performed music therapy significantly different. In the intervention group experienced a reduction in VAS scale more than the control group. The results of this study within their research hypothesis that there is an influence of music therapy on labor pain in the active phase of the first stage primigravidas based Kolcaba theory.

Both groups, both the intervention group and the control group, showed no significant differences that need to be analyzed more deeply. Some of the research subjects were included in the control group stated accompaniment conducted by researchers when enough data retrieval assist them in controlling pain and anxiety for the family not

allowed into the maternity room before the complete opening.

Music therapy is given during the active phase for 3 hours at primigravida inpartu proven to reduce labor pain decline although not too large. This is in accordance study of Phumdoung & Good (2003) that listening to music at the active phase during the first 3 hours is proven to reduce the sensation of pain and distress towards labor. Research Hosseini et al (2013) also proved that music can lower the first stage of labor pain in the active phase, but the music does not give effect on serotonin levels.

Giving music therapy using earphones slightly affect maternal comfort in listening to music therapy because when the contractions several research subjects chose to release the earphones and put them on again when the contractions stop. It also affects the decrease focus of mother to the relaxation effects produced by music therapy. Music therapy offers a relaxation method that is proven to reduce pain and improve the state of deep relaxation that can distract the mother of pain during childbirth (Martini, 2011). Research Salem (2004) showed that 92% or 34 maternity states music can help reduce labor pain. Easy birthing music helps the brain to release endorphins that can reduce pain during childbirth incorporating quantum mind programing methods to help birth mothers give birth to relax and minimize the pain during labor (Erwin, 2011). Timing of easy birthing music also affects the decrease in the level of pain and anxiety. Music during labor helps mothers to concentrate, relax, and breathe regularly, decreases anxiety and can distract from the pain that is felt (Phumdoung, 2003). But in this study music easy birthing given at the time of entry of the active phase in which the possibility of the mother or less focus on greater pain than to focus on the music provided so the decrease of pain scale is not too large.

Gate control theory to explain how music can reduce pain in childbirth by releasing endorphins. Endorphins will work as neurotransmitters and neuromodulators that would inhibit the transmission of pain impulses to the brain by closing the "gate control" in the dorsal horn. At the time of the peripheral pain neurons send signals to the synapse, synapses between neurons occurs and the peripheral pain neurons to the brain where it should have

substance P will conduct impulses (a neurotransmitter). At that time the endorphins to block the release of substance P from sensory neurons and endorphins bind to the opiate receptors are located in the synapse (μ) so that pain impulses are not transmitted to the brain (Tamsuri, 2007).

Figure 8 shows that the level of anxiety after doing music therapy in the study subjects experienced a decrease, either the intervention group or the control group. The test results of analysis by paired t-test showed that the intervention group performed music therapy significantly different. In the intervention group decreased VAAPS scale more than the control group. These results are consistent with the hypothesis of research that there is an influence of music therapy on anxiety in the first stage of labor primigravidas active phase based Kolcaba.

The results of the analysis by paired t-test in the control group also showed a significant difference, it needs to be analyzed in the grama. Similarly, the observation data retrieval pain, anxiety at the time of data collection, study subjects stated accompaniment conducted by researchers during data retrieval can reduce maternal anxiety in the face of labor. This shows the environmental and social (interaction with the midwife and researcher) greatly affects the perceived convenience of maternal. In this case the mother's physical and psychological discomfort, but the mother feel comfortable with the presence of social and environmental support from midwives and mentoring by researchers.

Stress in childbirth is the psychological stress arising as a combination of fear and pain experienced by women during childbirth (Abushaikha & Sheil, 2006). Anxiety delivery not only resulted in the mother, but also to the fetus. For mothers who are experiencing stress, the signal goes through the HPA axis (hypothalamo-pituitary-adrenal) can cause the release of stress hormones, among others, ACTH, cortisol, catecholamines, β -Endorphin, GH, prolactin and LH / FSH. The result is a systemic vasoconstriction, including constriction of vasa utero placental cause interruption of blood flow in the womb, so that the oxygen delivery (DO₂) into the myometrium disturbed, resulting weakening of the muscle contraction. uterus. The incident led to the more lengthy

process of delivery (prolonged labor) so that the fetus can experience gravity (fetal-distress). Besides, with the increase in cortisolplasma, resulting in lowering maternal and fetal immune responses. Thus the stress of labor may harm the fetus and the mother. The result carried over until the postpartum period, for example, disruption of the milk production, slowing wound healing labor, force the baby to suckle the mother weakened so slow infant weight gain. The end result of physical contact disturbed mothers and children, with various consequences (Schats, 1986 in Mulyata, 2007).

Music of easy birthing designed to stimulate brainwaves (brainwave entertainment) as induction medium to reach a receptive state of mind (theta), with a frequency of about 4-8 Hz, this music is able to slow down and balance brain waves (Erwin, 2011). This is consistent opinion of Campbell (2002) that the peak periods of creativity, meditation, and sleep is characterized by theta waves having a frequency of 4-7 Hz. Theta waves in the brain is believed to release endorphins which is an endogenous opiate body that can make the condition a person to relax so would hamper Hypothalamic-Pituitary-Adrenal Axis (HPA Axis). Hypothalamic CRF lower expenditures that will affect the pituitary gland to reduce secretion of ACTH. The decrease ACTH secretion may affect the adrenal cortex to inhibit the secretion of cortisol and other stress hormones (Ventura, 2011)

CONCLUSION AND RECOMMENDATION

Giving music therapy of easy birthing for 3 hours while the active phase of labor may reduce pain and anxiety, but does not reduce cortisol serum levels in the first stage of labor primigravidas active phase. Music therapy is expected to be used as a standalone intervention nurses in reducing pain and anxiety in maternal especially primigravida. Puskesmas as Health care centers level I are expected to apply labor pain management, one with music therapy. For further research, music therapy should be given for a period longer that mothers are more relaxed and better prepared to face the labor.

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ZIKA VIRUS AND PREGNANCY

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ABSTRACT

Introduction: Zika virus infection (ZIKV) has emerged as a significant threat for the health of pregnant women and newborns in populations living or visiting Latin America since the epidemic began in 2015. Reported possible consequences included particularly the risk of associated microcephaly, still to be proved in detail and confirmed, but potentially of other congenital defects.

Methods: The method used a database journals in PubMed, ProQuest and Medline used the keywords, after the data obtained was reviewed journal research was conducted. Search result found 22 journal but in accordanced with the topic was 8 journal with a span of February-March 2016. **Result:** 1). Provide further support for a link between maternal ZIKV infection and fetal and placental abnormalities that is not unlike that of other viruses that are known to cause congenital infections characterized by intrauterine growth restriction and placental insufficiency. 2). women with a positive ZIKV RT-PCR or with cocerning findings on USS should be referred to a fetal medicine service for evaluation and follow up. 3). Although there are several barriers for developing vaccines and other measures for pregnant women, these barriers are surmountable with concerted efforts and leadership.

Discussion: 1). Women with suspected or confirmed ZIKV infection should be monitored closely, with serial ultrasonography to evaluate for signs of placental insufficiency, given the risks of fetal death and intrauterine growth restriction. 2). All pregnant women who have potentially ben exposed to ZIKV should be revered to their local maternity unit for 4-weekly fetal ultrasound scan (USS) examinations. 3). No specific antiviral treatment is available for zika virus disease.

Key words : *zika virus, pregnancy*

INTRODUCTION

Pregnancy is a physiologically dynamic state. The immune profile of a pregnant woman is responsive to the changing levels of sex hormones and evolves through the course of pregnancy. However, most of the current knowledge base for vaccine response is derived from observational studies conducted in the latter part of pregnancy, with limited data available from the first and early second trimester or from randomized clinical trials. On the other hand, clinical, practical, and public health considerations require that vaccine use not be restricted to women with advanced gestational age. Given that a substantial portion of Zika's teratogenic effects may occur in the earlier phase of pregnancy, administration of any forthcoming Zika vaccine will be most beneficial prior to or during the early parts of pregnancy. The

knowledge gap for early pregnancy vaccine responses and safety will make the task of developing and recommending an effective Zika vaccine for use across pregnancy challenging. Infection with Zika virus in pregnancy is associated with arange off etalabnormalities, including fetal death and growth restriction in addition to neonatal microcephaly.

The current epidemic of ZIKV infection began in early 2015 in northeastern Brazil. Since then ZIKV transmission has been confirmed in 35 countries.⁴ One theory is that ZIKV was carried to Brazil by infected Pacific Islanders visiting an international canoeing event in Rio de Janeiro in August 2014. In September 2015 clinicians working in Pernambuco state noticed an increase in newborn babies with microcephaly. The Ministry of Health quickly established a

register and within 3 months recorded 4180 suspected cases, including 68 deaths, compared to a total of 147 reports in the whole of 2014.⁵ A review of the first 35 cases noted that 74% of mothers reported a rash during pregnancy and 71% of infants had severe microcephaly.⁶ ZIKV RNA was detected in the amniotic fluid of two mothers and from the brain of a baby who died shortly after birth.⁷ Taken together these data indicate a strong association between ZIKV infection during pregnancy and microcephaly, although a causal relationship is yet to be proven. ZIKV infection has an incubation period of 3–12 days. Patients may present with a fever, rash, arthralgia, and conjunctivitis. The illness is self-limiting and lasts for up to a week. Severe cases are uncommon.

It can be difficult to distinguish ZIKV infection from other viral illnesses such as dengue and chikungunya, which are also transmitted by *Aedes* mosquitoes. Population seroprevalence studies from the outbreak in Micronesia showed that 80% of ZIKV infections were asymptomatic,⁸ which presents a diagnostic problem in pregnancy if ZIKV crosses the placenta.

METHODOLOGY

The method used a database journals in PubMed, ProQuest and Medline used the keywords, after the data obtained was reviewed journal research was conducted. Search result found 22 journal but in accordanced with the topic was 8 journal with a span of February-March 2016. Keywords used were zika virus and pregnant. Fulltext articles and abstracts were reviewed to choose studies that fit the criteria. Criteria for inclusion in this review was zika virus and pregnant women. Keyword search using the above get 22 article, but the article in accordance with article 8 inclusion criteria. The article was used as a further samples are identified and presented in table 1.

DISCUSSION

Zika virus is a flavivirus transmitted by *Aedes* (*Stegomyia*) species of mosquitoes. In May 2015, the World Health Organization confirmed the first local transmission of Zika virus in the Americas in Brazil. The virus has spread rapidly to other countries in the Americas; as of January 29, 2016, local

transmission has been detected in at least 22 countries or territories, including the Commonwealth of Puerto Rico and the U.S. Virgin Islands. Zika virus can infect pregnant women in all three trimesters. Although pregnant women do not appear to be more susceptible to or more severely affected by Zika virus infection, maternal–fetal transmission has been documented. Several pieces of evidence suggest that maternal Zika virus infection is associated with adverse neonatal outcomes, most notably microcephaly. Because of the number of countries and territories with local Zika virus transmission, it is likely that obstetric health care providers will care for pregnant women who live in or have traveled to an area of local Zika virus transmission. We review information on Zika virus, its clinical presentation, modes of transmission, laboratory testing, effects during pregnancy, and methods of prevention to assist obstetric health care providers in caring for pregnant women considering travel or with a history of travel to areas with ongoing Zika virus transmission and pregnant women residing in areas with ongoing Zika virus transmission.

Although the most common mode of transmission of Zika virus to humans is from the bite of an infected mosquito, other modes of transmission have been documented, including maternal–fetal transmission. Transmission through blood transfusion and laboratory exposure also have been reported. Three cases of probable sexual transmission of Zika virus have been reported. The length of time that Zika virus remains in semen is unknown. Zika virus RNA has been identified in breast milk, but attempts to culture the virus were unsuccessful. Transmission through organ or tissue transplantation is theoretically possible, but has not been documented. Zika virus testing can be performed to detect the presence of viral RNA, antigen, or antibodies. Reverse transcription-polymerase chain reaction (RT-PCR) has been validated, and its performance has been evaluated in individuals with symptoms consistent with Zika virus disease. Reverse transcription-polymerase chain reaction testing to detect Zika virus RNA can be performed on serum, amniotic fluid, and other fluids, as well as tissues. Reverse transcription-polymerase chain reaction testing of serum is recommended within approximately 1 week of symptom onset. Viral

clearance can occur within 7 days of symptom onset; thus, a negative RT-PCR result on a test performed 5–7 days after symptom onset may not exclude Zika virus infection. Immunohistochemical staining also can be used to detect Zika virus antigen in tissues, including within placental tissues. Serologic testing can detect immunoglobulin M (IgM) by enzyme-linked immunosorbent assay as early as 4 days after illness onset¹⁹; however, a negative result on serum collected less than 7 days after illness onset does not exclude Zika virus disease. In addition, a positive IgM result can be difficult to interpret; cross-reaction due to previous flavivirus exposure, including vaccination (eg, yellow fever vaccine) and infections (eg, dengue virus), can occur. Zika virus IgM levels may be elevated as a result of this cross-reaction. Plaque-reduction neutralization testing can be performed to measure virus-specific neutralizing antibodies to Zika virus and other flaviviruses.

The levels of neutralizing antibodies can be compared between flaviviruses, but these tests may be difficult to interpret in individuals previously infected or vaccinated against flaviviruses. Health care providers are encouraged to work with their health departments to facilitate interpretation of Zika virus tests. As of February 12, 2016, commercial tests for Zika virus are not available. Zika virus IgM and plaque-reduction neutralization testing is performed only at CDC and a limited number of state and local health departments. Health care providers should contact their state or territorial health department for assistance with arranging testing and interpreting results. As an arboviral disease, Zika virus disease is a nationally notifiable condition and laboratory confirmed

cases should be reported to the state, territorial, or local health department.

Zika virus infection during pregnancy and effects on the fetus. Data on pregnant women infected with Zika virus are limited. Pregnant women can be infected with Zika virus in any trimester, and symptoms reported during pregnancy are similar to those in nonpregnant individuals. No evidence exists to suggest that pregnant women are more susceptible to Zika virus infection or are more severely affected once infected. Maternal–fetal transmission of Zika virus has been demonstrated throughout pregnancy. The full spectrum of outcomes that might be associated with congenital Zika virus infection is unknown; however, microcephaly, brain atrophy, ventricular enlargement, and intracranial calcifications have been reported in neonates who have tested positive for Zika virus infection. Ocular defects, scalp rugae, and joint contractures also have been reported in cases of suspected congenital Zika virus infection (ie, neonates with microcephaly for whom Zika virus testing had not been performed). In addition to the association with brain abnormalities in neonates, Zika virus RNA has been detected in the pathologic tissue specimens of fetal losses; however, it is unknown whether Zika virus caused the fetal loss.

The frequency of maternal–fetal transmission and the risk that a fetus infected with Zika virus will develop microcephaly or other congenital defects are unknown. It is also unknown whether the timing or severity of symptoms, viral load, maternal immune response, or other factors increase the risk of mother–fetal transmission or of the occurrence of abnormalities.

RESULT

No	Title	Author/year	Design	Population and Sample	Intervention	Control	Random	Outcome	Result
1	Diagnosis, management and follow up of pregnant women with zika virus infection: Apreliminary report of the ZIKERNCOL cohort study on Sincelejo, Colombia	Wilmer E, Villamil-Gomez. 2016	Retrospective	Pregnant women in endemic area	RT-PCR	No	No	Pregnancy outcome	28 pregnant women with confirmed by RT-PCR ZIKV under follow up

No	Title	Author/year	Design	Population and Sample	Intervention	Control	Random	Outcome	Result
2	Pregnancy in the Time of Zika addressing barriers for developing vaccines and other measures for pregnant women	Saad B.Omer, Richard H.Beigigi . 2016	Randomized clinical trials	Pregnant women from the first and early second trimester	Zika vaccine	No	No	Pregnant women	There are several barriers for developing vaccines and other measures for pregnant women
3	Zika virus and pregnancy, what obstetric health care providers need to know	Dana Meaney-Delman, Sonja A.R, J.Erin Staples,et all. 2016	Review information on zika virus	Pregnant women	CDC	No	No	Pregnant women	To assist health care providers who care for pregnant travelers to and residents of areas of zika virus transmission
4	Zika infection in pregnancy is linked to range of fetal abnormalities , data indicate	Susan Mayor. 2016	Collecting clinical and ultrasound scan data	Pregnant women	Tested blood and urine specimens in pregnant women	No	No	Pregnant women	Women with zika infection who underwent ultrasonography in pregnancy have delivered their babies, and the researchers said that the ultrasonographic findings were confirmed
5	Zika virus infection during pregnancy: what, where, and why?	Rachel M.Burke, Pranav Pandya, Eleni Nastouli, et all. 2016	Review article	Pregnant women	RT-PCR, EDTA plasma and urine sample from symptomatic patients	No	No	Pregnant women	Pregnant women should consider avoiding travel to areas with ongoing ZIKV outbreaks and seek advice from a travel health specialist
6	Increase in reported prevalence of microcephaly in infants born to women living in areas with confirmed zika virus	Wanderson Kleber, Juan Cortez, Wanessa Tenorio, et all. 2016	Morbidity and mortality report	The first trimester of pregnancy	RT-PCR in amniotic fluid samples	No	No	Pregnant women	Pregnant women should protect themselves from mosquito bites by wearing long sleeves and

No	Title	Author/year	Design	Population and Sample	Intervention	Control	Random	Outcome	Result
	transmission during the first trimester of pregnancy								long pants, applying insect repellent and when spending time indoors ensure that rooms are protected by screens or mosquito nets
7	Zika virus infection in pregnant women in Rio de Janeiro- Preliminary report	Patricia Brasil, Jose P.Pereira, Claudia Raja Gabaglia, et al. 2016	Cohort study	Pregnant women at any week of gestation	Testing used serum and urine specimens, RT-PCR, ultrasonography	No	No	Pregnant women	A further support for a link between maternal ZIKV infection and fetal and placental abnormalities that is not unlike that of other viruses that are known to cause congenital infection characterized by intrauterine growth restriction and placental insufficiency.
8	Zika virus and pregnancy: A review of the literature and clinical considerations (Podcast)	Caroline Mars, Gayle Olson, George Saade, et al. 2016	Review and synthesize the current literature regarding ZIKV	Pregnant women	RT-PCR, ultrasonography, amniocentesis	No	No	Pregnant women	Case report support intrauterine transmission and an association between maternal ZIKV infection and fetal microcephaly and calcifications

CONCLUSION AND RECOMMENDATION

Provide further support for a link between maternal ZIKV infection and fetal and placental abnormalities that is not unlike that of other viruses that are known to cause congenital infections characterized by

intrauterine growth restriction and placental insufficiency. Women with a positive ZIKV RT-PCR or with concerning findings on USS should be referred to a fetal medicine service for evaluation and follow up. Although there are several barriers for developing vaccines and other measures for pregnant women, these

barriers are surmountable with concerted efforts and leadership. All pregnant women who have potentially been exposed to ZIKV should be referred to their local maternity unit for 4-weekly fetal ultrasound scan (USS) examinations. To assist health care providers who care for pregnant travellers to and residents of areas of zika virus transmission, CDC, has developed interim clinical guidance.

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MINDFULNESS THERAPY AS TERTIARY PREVENTION FOR CHILD ABUSE SURVIVORS

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ABSTRACT

Introduction: Early 2015 child abuse increased to 6006 cases in Indonesia. Specialy protection is given to the child victims of sexual crimes, can be psycho-social assistance and rehabilitation. The series of child protection at the community level, started from primary prevention, secondary prevention, and tertiary prevention. Mindfulness therapy can be one of nursing intervention at the tertiary level. **Method:** This systematic review do a search on the publication of articles search system EBSCO andPubMedby keyword mindfulness, sexual abuse, and children. Search is limited on 2010-2016 edition, can be access in fulltext and have been scholarly peer reviewed with RCT and QE design, used mindfulness therapy for woman adults survivors sexual abuse. Appropriate articles are then analyzed using critical appraisal tool. Data extracted froms articles have been classified, discussed, and concluded.**Result:** Four articles with 1 high quality and medium quality for other. Discussed result show that mindfulness therapy significantly reduce level of depression, anxiety level, and post traumatic stress disorder. **Conclusion:** Mindfulness therapy can be one of holistic nursing intervention for all of aggregate in community nursing especially tertiary prevention.Reduce level of depression, anxiety level, and post traumatic stress disorder.

Key words: *mindfulness, sexual abuse, children*

INTRODUCTION

Childhood sexual abuse (CSA) has been defined as a sexual act between an adult and a child in which the child is utilized for the sexual satisfaction of the perpetrator. A recent U.S census found that 9,6 million women between the ages of 15 and 54 reported experienciing childhood sexual assault or abuse that occured before 18 years of age (Hill, Vernig, Lee, Brown, & Orsillo, 2011). A Chief of Komisi Perlindungan Anak Indonesia, predicted that sexual abuse to children increased, because of acces to pornography acces easily, “Kami memprediksi angka kejahatannya naik” (Tempo, 2016). He said thats a factor, there is a lot of case perpetrator from around of victim. According to national data 2010-2014, children sexual abuse has 58% from 21.736.859 case report crime on children. As alarming as such figures are, CSA is likely still underreported due to the stigma associated with sexual abuse and fear that disclosure colud invoke further abuse from the perpetrator or other negative consequences (Earley et al., 2014).

“Holistic nursing is all nursing practice that has healing the whole person as its goals

and holistic caring process is a circular process thaht involves six steps that may occur simultaneously” (Dossey & Keegan, 2013). Holistic nursing focuses on protecting, promoting, and optimizing health and wellness. Holistic nursing care is healing oriented and centered on the relationship with the person in contrast to an orientation toward diseases and theirs cures. Holistic nursing emphasizes practices of self care, intentionality, presence, mindfulness, and therapeutic use of self as pivotal for facilitation of healing and patterning of wellness in others.

Mindfulness is one of therapy as nursing intervention in holistic nursing. Mindfulness has been defined as the “intentional process of observing, describing, and participating in reality nonjudgementally, in the moment” (Greco & Hayes, 2008). Although some empirical support for the direct use of mindfulness with adolescent sexual abusers is available, the raises question of wheter mindfulness is a method unto itself or reflects a common facator across therapeutuc approaches (Jennings, Apsche, Blossom, & Bayles, 2013).

Community health nursing, has a prevention concept as a key component of modern community health practice. Tertiary prevention is employed after diseases or events have already resulted in morbidity. The purpose of tertiary prevention is to limit disability and to rehabilitate or restore the affected people to their maximum possible capacities (Anderson & McFarlane, 2011). Adequate shelters for battered women and counseling and therapy programs for sexually abused children are examples of tertiary prevention.

In addition to level of prevention, we need to consider the level of practice. Mindfulness is present-moment nonjudgemental awareness, while compassion is an active and kind turning toward suffering with the aim of relieving it to whatever degree possible (Wolf & Serpa, 2015). Adult survivors with child sexual abuse did not get a correct therapy, it will highly prevalent depression disorder with a large negative impact on quality of life and yielding high economic cost (Pots, Meulenbeek, Veehof, & Klungers, 2014). As community nursing, we should make contribution to global health equity involves, with education for the identification and prevention or control of prevailing health problems as one of essential elements of primary health care (Anderson & McFarlane, 2011). Optimal use of available resources to assure the best overall improvement in the health, such as practice mindfulness therapy as one of tertiary prevention level especially for high risk group, in case adult survivors with child sexual abuse. General purpose to know effect mindfulness therapy as tertiary prevention for adult survivors sexual abuse. Specific purpose are to know effect mindfulness therapy for decreased depression, effect mindfulness therapy for decreased anxiety level, and effect mindfulness therapy for decreased post traumatic stress disorder.

METHOD

Systematic reviews used in this paper. Inclusive and exclusive criteria are Type of study: v Randomized Controlled Trial and Quasi experimental also correlational analytic are used in this systematic reviews. Respondent characteristics : This systematic reviews ini focused to research who give intervention for adult survivor sexual abuse.

Type of intervention: Main intervention in this systematic review is a mindfulness therapy as intervention in nursing. Result: These results are reduce level of depression, anxiety level, and post traumatic stress disorder. Literature Searching Strategi: Investigation this published article on *academic* search complete and medline using the key words (appendix 1). Appropriate article with the inclusive and exclusive criteria then be analyzed. This systematic reviews used articles published on 2010-2016 where can access by full text on pdf format and scholarly (peer reviewed journals). Study Quality Assessment Method: This systematic review used Critical Appraisal Skills Programme (CASP) for rate research quality from www.casp-uk.net (appendix 3) then extraction process and synthesis method. Data Extraction Method: main data from the articles such as: researchers and year, design, place, characteristic of sample, main intervention and result. All of data include in data extraction table. And data Synthesis : This data synthesis used narrative method with classified the result of data extraction. The collected data has been analyzed and be conclude.

RESULTS

Investigation with 3 keyword are mindfulness, sexual abuse, and children on searching engine ebsco and got 4 articles (table 1). Based on table 1, three articles has medium quality with quasi experimental and correlational analytic and 1 article has high quality with randomized controlled trial design. Both used mindfulness therapy for adult survivors sexual abuse.

First article (Kimbrough, Magyari, Langenberg, Chesney, & Berman, 2010), recruited adult CSA survivors through advertisements in Baltimore newspapers and radio, informational flyers widely distributed through the state chapter of registered social workers, CSA survivors networks and advocacy groups, and in community health fairs. Eligible participants following baseline were asked in the MBSR class for 8 weeks, followed by an 8 weeks assessment visit. The intervention then continued with participants invited to three MBSR refresher classes over 4 months, with the final assessment made 24 weeks post baseline. Each MBSR class session had four components; (a) learning and practicing formal meditations; (b) learning and

reinforcing informal practices; (c) inquiring into one's experience in domain of physical, emotional, and cognitive experience; while observing those experiences nonjudgementally (mindful inquiry); and (d) discussion of the previous week's lessons and home practice experiences (integration).

Home practice had three components each week: (a) formal meditations; (b) informal practices; and (c) reading the companion text *Fill Catastrophe Living* which provides an articulation of the concept and practice of mindfulness. Participants were asked to practice at home 20-30 minutes a day, 6 days a week from week 1 to week 8, aided by audio CDs. Outcome measures by Beck Depression Inventory Second Edition (BDI-II), PTSD checklist, Brief Symptom Inventory for measured anxiety, and Mindfulness Attention Awareness Scale (MAAS).

Second article (Hill et al., 2011) selected participants from a pool of 95 undergraduate women enrolled in psychology courses as private, who were at least 18 years of age and completed measure assessing CSA. Childhood sexual assault was defined as sexual contact that ranged from fondling to intercourse occurring before the age of 17 years that (a) occurred without consent or was unwanted, (b) was perpetrated by a family member, or (c) was perpetrated by a person more than 5 years older than the participant. To create a roughly comparable group, 25 women without reported CSA history were contacted and asked to participate in the program. Participants were primarily white (74.6%) and had mean age of 18.9 years (standard deviation = 1.88). There were no significant differences in ethnicity or religious affiliation between women with and without history of CSA.

Third article, invited the original MICAS participants to return for a single session follow up assessment to contribute to a better understanding of the ongoing effect of MBSR among those recovering from CSA. The MICAS-II study comprised a single 3 hour research visit that was completed in person or over the phone if necessary. Participant first spoke with the research coordinator, who completed the informed consent process, before completing a series of self report questionnaires requiring approximately 1 hour to complete. Finally, each participant completed an interview, with their original MBSR teacher, designed to assess the

participant's health and well-being and gain valuable feedback for improving the intervention for potential future interventions for this population (Earley et al., 2014).

Fourth article was evaluated at their unit during the years 2013 and 2014. As part of their assessment, diagnostic interviews were administered in two different sessions. After BPD diagnosis was confirmed, patients were invited to participate in the study. The diagnostic measures to ensure an accurate BPD diagnosis the Spanish versions of two semi-structured clinical interviews were used. Self report questionnaires to assess adverse childhood experiences the Childhood Trauma Questionnaire-Short Form was administered. The results are given that no associations were found between demographic variables (age, gender, and education level) and any of the mindfulness facets, these variables were not included in the regression models (Elices et al., 2015).

DISCUSSION

The victimization rates found that provide further evidence that sexual victimization among college women is a significant issue. Approximately 37% of female undergraduates who initially agreed to participate in second research reported a history of CSA and 12.7% of participants experienced some form of sexual victimization during the follow up period (Hill et al., 2011). Additionally, five different types of childhood maltreatment were assessed in fourth research, but only sexual abuse appears to be related with mindfulness deficits, having negative impact on acting with awareness and increasing the judgemental stance towards inner and outer experiences. Based on research findings, it appears that temperamental traits might not play a role in moderating the relationship between a history of sexual abuse and mindfulness deficits (Elices et al., 2015). The phenomenon of peritraumatic dissociation that is emblematic of attempts to avoid and protect oneself from overwhelming traumatic experiences. The mindful state fostered and encouraged in MBSR is characterized by a focus on the present and an awareness of the transitory nature of thought and feeling. Such a stance may represent an effective means for confronting memories of childhood trauma (Earley et al., 2014). Indeed, mindfulness based interventions have demonstrated efficacy

in reducing cognitive and physiological reactivity to stress and negative mood states, lending support to the notion that such treatments may decrease avoidant behavior (Brewer et al., 2011). Specifically, participation in MBSR was significantly associated with reduced depressive symptoms. With increased ability to become witness to thoughts, rather than immersed in their valence and content, there follows increased psychological flexibility enhanced emotion regulation, and reduced rumination (Kimbrough et al., 2010).

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CONCLUSIONS AND RECOMENDATION

In addition to contributing to a survivor's ability to be present to his or her own painful emotional experience, mindfulness skills also may enhance one's capacity to be present in holistic nursing intervention. In this way, mindfulness may potentiate therapeutic work for all of aggregate in community nursing especially tertiary prevention. Its may serve as widely available, potentially cost effective way for clinets to reduce level of depression, anxiety level, and post traumatic stress disorder.

THE EFFECTIVENESS OF THE APPLICATION OF PREVENTION OF HIV INFECTION TRANSMISION FROM MOTHER TO CHILD IN REDUCING THE VERTICAL INFECTION

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ABSTRACT

Introduction: The number of HIV/AIDS infection in children is increasing. This is due to the incidence of HIV-infected pregnant women also increased. Most infants and children are suffering from HIV infection got the vertical transmission of HIV-infected mothers. To decrease the vertical transmission of HIV from mother to child, the program needed to implemented optimally and effectively. This study aims to examine the literature, journal articles and research related to the prevention of HIV infection to Reduce Mother to Child Vertical Transmission. **Method:** The method used database of national and international journals in Pubmed, JIAS and Medline to research topics period of years 2010-2015, using keywords, and found 144 articles later in the relevant criteria to 17 journals. **Result:** The results of literature review that in many countries has performed a variety of strategies to prevent vertical transmission from mother to child. The strategy that agreed by WHO is PMTCT, which meet various obstacles in its implementation, so that needed the necessary strategy in its application. Implementation of PMTCT done by involving community, family, husband, early ARV provision and integrated ANC in pregnant. The right strategy in the implementation of PMTCT is highly effective will reduce the number of HIV-AIDS transmission from mother to child. **Discussion:** PMTCT implementation will significantly accelerate the decline rate of transmission of HIV from mother to child if the application is supported by good health policies in each country. Support in the form of availability of VCT clinics and disseminate PMCTC program in the community.

Key words: *pmtct, hiv, effectiveness, vertical transmission.*

INTRODUCTION

HIV and AIDS is a health problem in the world that is still high transmission of infection, morbidity and mortality. Globally HIV cases in 2014, there were an estimated 36.9 million people are living with HIV , 41 % of all adult living with HIV were accessing treatment in 2014 , 32 % of all children living with HIV and 73 % of pregnant women living with HIV had access to antiretroviral medicine to Prevent transmission of HIV to Reviews their babies.¹ In developing countries HIV AIDS is the leading cause of death women of reproductive age. HIV infection in pregnant women can be life threatening mother and the mother can vertical trasmission the virus to their child. More than 90 % of cases of children HIV infection, is transmitted through the process of transmission from mother to child (MTCT). The HIV virus can be transmitted from an infected

mother to child during pregnancy, during childbirth and while breastfeeding.²

Since it was first discovered twenty-five years ago, HIV and AIDS cases in Indonesia continue to increase, especially in the reproductive age of 20 -39 years. At the end of 2012, there were an estimated 591.823 people infected by HIV, (30%) was women. Transmission of HIV from mother to infant or child 90% during pregnancy, childbirth, and breastfeeding.³ If the spread of HIV-AIDS increased, it will become a huge threat for public health, especially on reproductive health resulting in increasing maternal and infant mortality. The National AIDS Strategy 2010-2014 explained that transmission of HIV from mother to child tends to increase along with the increasing number of women positiv infected with HIV either from their couple or as a result of risky behavior.⁴

Transmission of the virus from mother HIV positive to her child can occur during pregnancy, childbirth or through breastfeeding. Without intervention, vertical transmission occurs to 4 out of every 10 births among women with HIV positive. Vertical transmission of HIV from mother to child during pregnancy, childbirth, and breastfeeding can be reduced to 5% using a strategy known as PMTCT (prevention of mother to child transmission), which includes the administration of a combination of antiretroviral medications (ARVs) during pregnancy, delivery, and for the duration of breastfeeding and in most developed countries has resulted in the virtual elimination of vertical transmission.¹

Preventing HIV among infants and young children involves a four-pronged approach: primary prevention of HIV among women of reproductive age use the health service delivery points and the structure of society; provide support and counseling for women living with HIV to empower them to make informed decisions about their reproductive lives; ensuring that pregnant women living with HIV were tested and have access to treatments that will improve their health and prevent vertical transmission of HIV to their babies; and integrate HIV care, treatment and support for women living with HIV and their families.⁴

PMTCT has been widely implemented in developing countries for a number of years, but it has not achieved the same levels of success as observed in the developed world. An important contributing factor has been the failure to achieve high coverage for each of the critical events in the PMTCT.⁵ Elimination of vertical transmission of HIV is a global priority, but progress in each country is different, based on the state of the country. Health systems are weak, unreliable infrastructure, lack of health staff contributed to the scope of services is not enough, but it became clear that many of the barriers to achieving universal access to PMTCT occur outside the formal health services.⁶

The effectiveness of prevention of mother to child transmission (PMTCT) is influenced by many factors. Health policy and economic level of a country is needed to fulfill PMTCT, need support from various sectors in order to be successful PMTCT.

METHOD

Literature on the effectiveness of PMTCT in reducing vertical transmission of HIV from mother to infant available on PubMed, JIAS, BMC Public Health and MEDLINE, between the years 2010 - 2015. It was found 144 journals relating to the implementation of the PMTCT, prevention of HIV transmission from mother to infant and implementation of community-based PMTCT and their effectiveness. Journal inclusion based on the relevant results so obtained 17 relevant journals. Studies were initially identified using the search terms "PMTCT", "HIV" and Vertical Transmission.

RESULT

Results of study literature it is known that to reduce the vertical transmission of HIV from mother to child, the strategy is PMTCT. The implementation of PMTCT in several countries did not immediately produce results. The implementation of PMTCT need strategies and the support of various sectors to be effective. Of the 17 articles grouped into four discussion in the implementation of PMTCT. 6 article focus on community based in implementation of PMTCT, 5 article focus on medicine of ARV in pregnancy women, 4 article focus on involvement partners and family in implementation PMTCT.

Components critical to the successful prevention of mother to child transmission of HIV with medicine ARV. The Lesotho MPP was implemented in an era when the primary recommendation for PMTCT prophylaxis was AZT beginning at 28 weeks and ending 1 week after birth, paired with additional medications for the mother and infant during labour/delivery and postpartum. This guidance has evolved, and the most recent WHO programmatic update highlights the greater simplicity and programmatic advantages of short-course (Option B) and lifelong (Option B) antiretroviral therapy for pregnant women living with HIV.⁷ This shift towards the use of fixed dose triple ARV regimens for both treatment and prevention of mother to child transmission of HIV will enable greater streamlining of co-packaged medicines.⁸

In the context of a PMTCT that included a case management intervention to facilitate diagnosis disclosure to partners and encourage partner testing, Pregnant women with a tested

partner were more likely to have a child who completed the program and remained alive and HIV negative. When the primary purpose of HIV care and treatment is prevention of vertical transmission of HIV, with the secondary purpose of providing a gateway to care for parents, patient oriented and family centered comprehensive service delivery contributes to HIV free infant survival, PMTCT program completion, and linkage of positive male partners into care.⁹

Our review found evidence of effectiveness of strategies targeting individuals and peer/family levels (e.g., providing household HIV testing and training peer counsellors to support exclusive breastfeeding) and at community level (e.g., participatory women's groups and home-based care to support adherence and retention). Evidence is more limited for complex interventions combining multiple strategies across different ecological levels. There is often little information describing implementation; and approaches such as "community mobilization" remain poorly defined.¹⁰

Our analysis of the Networks model shows that it could contribute to the prevention of vertical transmission of HIV as a replicable and sustainable community mobilisation approach. In particular, the Networks model increased the uptake of decentralized interventions for preventing vertical transmission through community referrals; promoted male involvement through peer sensitisation; and linked communities to advocacy channels for advancing maternal health and prevention of vertical HIV transmission.¹¹ The consultation provided some understanding and insight into the participants' experiences with and recommendations for PMTCT strategies. Participants agreed that successful, comprehensive PMTCT programming require greater efforts to both prevent primary HIV infection among young women and girls and, in particular, targeted efforts to ensure that women living with HIV and their partners are supported to avoid unintended pregnancies and to have safe, healthy pregnancies instead. In addition to providing the insights into prevention services discussed above, the consultation served as a valuable example of the meaningful involvement of people living with HIV in programming and implementation to ensure that programs are tailored to individuals' needs and to circumvent rights abuses within those settings.¹²

The Prevention of Mother to Child Transmission World Health Organization (WHO) and United Nations (UN) have developed a comprehensive four-pronged strategy aimed at integrating key interventions into essential maternal, newborn and child health services: 1. The first prong emphasizes the importance of preventing HIV among women of reproductive age before they get pregnant; 2. The second prong is focused on the prevention of unintended pregnancies among women living with HIV; 3. The third prong focuses on pregnant women who are already infected and demands that HIV test be integrated into antenatal care, that they receive ARVs to prevent transmission of the virus and for their own health and that they are counseled adequately on the best feeding option for their baby; and 4. The fourth prong calls for better integration of HIV care, treatment, and support for women found to be positive and their families.⁴ Comprehensive and Sustainable PMTCT Services Sustainable Comprehensive Services (SCS) component includes all forms of HIV and STI (Sexually Transmitted Infection) services, such as IEC (Information, Education, and Communication) activities for comprehensive knowledge, HIV test and counseling; care, support, and treatment (CST); prevention of mother-to-child transmission (PMTCT); and non-referral including other health facilities, referral hospital, and people living with HIV in District or city; and the active involvement of the public sector, including families.

DISCUSSION

In many of the regions with the highest burden of HIV and the greatest number of new vertical transmissions, the uptake of facility-based care by pregnant women remains low, as does retention in such care. In these same areas, many of which have facility-based PMTCT uptake of well under 50% of women living with HIV, community engagement is also limited. Programmes that do not extend beyond facilities and fail to engage lay staff will not be able to achieve the level of prevention of vertical transmission coverage required to approach zero new transmissions of HIV to children. In addition, the women most at risk of acquiring HIV and most in need of treatment may be the least able to access services. Community-based solutions are essential to ensuring women and their children have access

to the full cascade of prevention of vertical transmission interventions. As literature on community-based prevention of vertical transmission strategies is limited, this review also includes what we call “community-oriented” prevention of vertical transmission strategies, where community level units well positioned to improve prevention of vertical transmission outcomes conduct activities that are housed in facilities. By including both of these categories of interventions, this review summarizes the limited, collective literature describing which community-based and community-oriented efforts have demonstrated statistically significant improvements in prevention of vertical transmission outcomes such as the retention of HIV positive pregnant women and their infants in care; HIV positive pregnant women continuing their treatment; mothers giving their HIV exposed infants prophylaxis and, ultimately, survival of both mother and child.

However, unlike more specialized healthcare providers, these personnel are often readily available where the need is greatest and can be efficiently and effectively trained and recruited to implement prevention of vertical transmission interventions. Importantly, as studies included in the review show, these community groups can effectively engage mother-infant pairs and partners both at facilities and within the community at large. In fact, many of the study outcomes summarized in this review were achieved by integrating both community-based and facility-based community.

CONCLUSION AND RECOMMENDATION

The study here include some proven, that the application of highly effective PMTCT reduces vertical transmissions of HIV from mother to child. Community-based strategies in the implementation of PMTCT is a factor that increases the effectiveness of PMTCT results. Accelerating decline in the numbers of HIV vertical transmission from mother to child needed the support and cooperation of different sectors. Dissemination of information about PMTCT also needs to be extended to all levels of society. Government policies that support the implementation of the PMTCT and availability of facilities that are accessible to the public.

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MILIARY MODEL BABY'S NURSING WITH TOPICAL BREASTFEEDING ON THE INCIDENCE OF IN THE BABY'S SKIN INFECTION

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ABSTRACT

Introduction: Malaria often affects miliary model baby's nursing with topical breastfeeding on the incidence of in the baby's skin infection. The population is babies aged 1-24. The sampling technique used consecutive sampling technique for 20 babies. The incidence mostly happens on the first years. Milliary which does not get any care and treatment will cause complications such as dermatoses and infections. About 40% of newborns in Indonesia ever experienced miliary and it ranks 7 out of 10 skin diseases in infants and toddlers. Miliary care in the community by providing some talcum powder constantly will clog the skin glands and worsen the condition. Some studies of topical medications and local antibiotics given to miliary are not very effective and can sometimes worsen the condition (Harahap M, 2000). Miliary treatment using traditional ways would be better by using topical treatments model of breast milk on the baby's skin. Breast milk has many immunological agents, anti-inflammatory and antimicrobial materials, proven by empirical, theoretical or scientific, clinical practice and culture. The research objective was the implementation of infection by making data tabulation and analysis of data using statistical tests. **Methods:** The incidence of infection variable analysis was tested using Fisher's Exact Test (X^2) because signs of infection was in nominal scale categories and it aimed to see whether there is any influence on the incidence of infection in the group model of care topical treatment of breastfeeding and treatment groups daily habits, with significance of $p \leq 0:05$. **Results:** The results show that the majority of respondents is younger than 12 months, almost all parts of the baby's body get milliary and it gets worse during hot weather. Milliary infection in the two groups is still relatively high. The results of Fisher's Exact Test (X^2) to determine differences in the incidence of infection between the intervention group and control group show the value of $p = 0.303 > 0.05$, which means that H_0 is accepted, meaning that there is no difference in the incidence of infection in infants between treatment group and control group. **Discussion:** People can use other breast milk as a substitute for other topical for the treatment of miliary because it can decrease the incidence of infection in babies. Breast milk topical treatment model for miliary is considered as a cheap, safe, and no side effects method of treatment.

Key words: *miliary model baby's nursing, topical breastfeeding, skin infection*

INTRODUCTION

Miliary is a skin disease because of the blockage of the sweat ducts keratin characterized by skin spots, small bumps and watery. Miliary often attack the baby, because a baby's skin structure thinner, weaker bonds between cells and smooth and more sensitive, so the skin is susceptible to skin disorders and growth of pathogenic bacteria (Amirudin, 2003). Problems miliary occurs in infants and mothers, especially if they do not get good care there will be complications dermatoses settled, whereas on miliary widespread and no treatment would be an infection caused by bacteria that is difficult to control. Bacteria often happens is staphylococcus aureus and stap staphylococcus sp, while the bacteria staphylococcus epidermis is a

normal inhabitant of the skin that rarely cause infection (Ferry FA, 2011)

Based on the study of WHO (World Health Organization) there are 80% of the world population affected by miliary, with the number of events 65% of whom were attacked in infants. Indonesia around 40% of infants born to experience miliary and ranks 7 out of 10 skin disease in infants and toddlers. The incidence of skin disease miliary will increase to 50% in the hot and humid summer boosted by baby skin care workers. Data of cases of skin disorders in infants and children including miliary which accompanied a bacterial infection including 10 occurred in the children's clinic Poly RS Dr. Cipto Mangunkusumo throughout 2003-2008 (Titin, 2010).

In the preliminary survey at the Sumber Porong Ponkesdes held on March 3, 2015, by way

of interviews and documentation of Midwives Heni C.Ihwan number of infants 0-24 months of 222 infants, the incidence of cases of miliaria ranked third after ARI and diarrhea. Information data from dr. Yuslikah as Puskesmas Lawang doctor and Mr. Eko S.Kep. Nurses as pemengang program P2 M data showed that toddlers who came for treatment for severe miliaria disease, does not heal and followed comorbidities are usually ISPA, and information from the head of KIA Mother Goddess miliaria cases are found more often when activity at the Posyandu.

The cause of miliaria in infants of very varied such as irritation , allergies, lack of moisture , poor hygiene and bacteria . Miliaria impact that often happens is that the skin red , raised spots murky watery , burning sensation and itching . Miliaria often ignored by most people because it is not considered harmful , although miliaria at an early stage will usually heal itself several days to 2 weeks . In most societies the care and treatment miliaria done not as good as babies are afraid to bathe , excessive bathing with soap , it will irritate the skin . Other treatments such babies should always be given powder or talk constantly, it will clog the skin glands and will exacerbate the miliaria . Some studies of topical medications and antibiotics are not appropriate given local in miliaria not very effective and can sometimes increase the amount of miliaria (M Harahap , 2000) .

Care and treatment of miliaria with the main goal is to relieve the itching and prevented or infection. skin by staphylococcus bacteria. In 1998, the WHO recommends to conduct research will use ASI. Several studies have proven the benefits of breast milk such systematic review by Zupan et al. (2004) database Corhrone concluded that breastfeeding can be prevented or umbilical cord infection and healing Payi. While the results of previous research by Kasiati, (2012) know that the milk can be prevented or omphalitis topical umbilical cord. Then the milk can be used in an attempt to prevented or complications and infections of the miliaria, thereby contributing to morbidity and mortality, one of them with pencengahan acts as a good skin care, correctly and safely. Miliaria can recover several days to 2 weeks. Healing menyakup prolonged use of drugs and antibiotics local and widespread skin infection (Harahap M. 2000). Mullany (2003) argued that breastfeeding has many immunological agents, anti-inflammatory and antimicrobial materials. Breast

milk also contains immune, non immune and cellular components (Wahap 2002). Several studies related to breastfeeding as Farahni (2008) describes the use ASI cord care had effective in reducing the risk of umbilical cord colonization of pathogenic organisms (Staphylococcus).

Perawatan miliaria menggunakan cara tradisional akan lebih baik dari pada memberikan obat-obatan lokal yang tidak efektif dan ada kemungkinan miliaria tambah banyak dan menyebabkan iritasi kulit. Salah satu intervensi yang dapat di lakukan oleh perawat adalah dengan memberikan asuhan keperawatan pada kulit bayi di rumah dengan pendekatan model perawatan topikal air susu ibu (ASI) berdasarkan empiris , teoritis atau ilmiah dan praktek klinis. Model asuhan perawatan topikal ASI dapat mencegah infeksi pada kulit bayi .

Miliaria treatment using traditional means would be better than giving local medicines are not effective, and there is the possibility of miliaria added much and cause skin irritation. One intervention that can be done by nurses is to provide nursing care at home with the baby's skin care model approach topical breast milk (ASI) based on empirical, theoretical or scientific and clinical practice. Model of care topical treatment milk can be prevented or skin infections in infants

Miliaria treatment using the milk, because milk contains immunoglobulin A, G and M as an anti-infective, whereas non-immunoglobulin in the milk such as lactoferin and lysozyme. Approach with topical treatment of breast milk in children with miliaria memiliki nature of critical thinking developed by nurses that human milk as a skin care practice is harmless, free, available and sterile for infants from infection prevented or skin. Several studies have proven that the treatment of skin and wound up with ASI is a method that is safe, effective and efficient should be developed further.

Based on the results of research and many other topical variety that is used for the treatment of miliaria at home as well as some health services , and the lack of research or application of models of care with topical ASI miliaria then we did some research to prevented or incidence of infection in the baby's skin

METHODS

This research method is quasy Experiment . Manggunakan Design Randomized Post Test Only Control Group Design , where

researchers divide the two groups, the treatment group and the control group . Before the intervention is given to the two groups were observed on keadaang skin . Furthermore, the intervention group taken care of by applying milk to the entire skin is attacked miliary to flatten at least 2 times / day for 2 weeks . In the control group of non topical treatment as usual were the parents of children . During the two weeks both the treatment group and the control is always observed on a daily basis . The population in this study are all children aged 1-24 months who had miliary . Large population of as many as 20 children were divided into 2 groups: the treatment group and the control group . The sample in this study are some children who experience miliary samples that meet inclusion criteria

In studies using Consecutive sampling selection of samples by determining a subject who met the study criteria within a certain time , so that the required number of respondents met. Independent Variables : Model ASI topical treatment in children miliary. Dependent Variables : miliary infection calfskin

RESULT

The area Ponkesdes "BERSEMI" Source Porong subdistrict Lawang consisting of 16 Posyandu, area surveyed was randomly assigned 8 posyandu than 16 Posyandu is there with details as follows 1) RW 08 Posyandu activities held Saturday the first week with the number of infants who come in 8, milliarea case 1 (control). 2) RW 14, Monday the first week with the number of infants who come in 16 toddlers, case milliaria 3 (2 intervention and one control), 3) RW 03 Tuesday first week with the number of infants who come, case milliaria 2 (1 intervention and one control), 4) RW 16, on Thursday the first week of the number of infants who came 64 with the number of cases 6 (3 intervention and 3 control), 5) RW 13, Monday week to two the number of infants who came 30 with the number of cases 3 (2 intervention and one control), 6) RW 05, Tuesday week 2 the number of infants who come in 28 cases milliaria 3 (2 intervention and 1 dick), 7) RW 12, Rabo weeks to 2, the number of infants who came 16 with case milliaria 3 (2 intervention and one control), 8) RW 04, Thursday week to two, the number of infants who come in 22 cases milliaria 2 (control), Event posyandu in the Work Area Ponkesdes "BERSEMI" in layanai by a midwife is Mrs. Henni with a

complex service in Sumber Porong Village Office. The number of infants in the Work Area Source Porong Ponkesdes less than 24 months as many as 200 babies

General data characteristics of the respondents will be presented in the form of data related to the research objectives include: gender, age, location milliaria , causes, and the efforts of parents to care

Table 1 on page previously known in the treatment group as much female and male respectively of five infants (50%), and most of the control group sex male as much as 7 children (70), while the yield on the two group sex mostly male (60%). Respondents in the study the majority of the treatment group was less 12 months as many as nine infants (90%), and a control group of age less than 12 months as much as 5 infants (50%), while the yield on the two groups attack milliaria mostly aged infants less than 12 months 70%.

Respondents in the two groups of the average area of the skin is attacked locations milliaria mostly two or three places of the body, namely the head face, neck, and chest and abdomen, the treatment group of the head and face and chest and abdomen respectively as 8 infants (80%) and the neck region as much as 6 infants (60%), while the control group was also 2-3 parts of the body that is the chest and abdomen were attacked melliaria many as 8 infants (80%) and milliaria attack on the head and face as much as seven infants (70%). Respondents in the two majority groups that attack skin milliaria contained in a 2-3 body parts (average 2.8 point), head, neck, chest and abdomen baby is 70%.

Almost all respondents in the two groups have a history of attacks milliaria occur in hot weather is in the treatment group were 9 children (90%) and 1 muncuknya beginning of a sudden, as well as a control group were 7 children (70%) and the initial attack suddenly -Arrived 6 children (60%).

Respondents in both groups carried out the treatment to infants who fell ill milliaria before becoming the subject of research is all baby dilalukan shower 2 times / day and shower using soap respectively 100 % , while using talc on baby's skin is attacked in the treatment group as much as 5 babies (50 %) and carried out more than 3 times / day,while the control group as much as 6 infants (60 %)

Table 2 is known that 10 infants in the treatment group them get the model topical treatment of breast milk in the baby's skin milliarria

attacked , smeared ASI and performed 2 times /days to 12 days .

Table 1 Distribution of the frequency based on the data characteristics of respondents milliarria in children

Characteristics	Treatment group		control group	
	Fre (n)	Percentage (%)	Frek (n)	(%)
Sex				
Male	5	50	7	70
Female	5	50	3	30
Total	10	100	10	100
Age				
1 - 12 month	9	90	5	50
13 - 24 month	1	10	5	50
Total	10	100	10	100
locations				
Milliarria				
Head, face Neck	8	80	7	70
	6	60	6	60
Back	6	50	7	70
Chest and abdomen	8	80	8	80
Total	28		28	
Average	2.8	100	2.8	100
The cause of the attack				
Hot	9	90	7	70
Suddenly	1	10	6	60
Total	14	100	10	100
the situation of children				
Fussy	5	35.7	4	36.4
Scratch	9	64.3	7	63.6
Total	14	100	11	100
How to care				
Bath	10	100	10	100

Table 2 Distribution of the incidence of infection

Infection incidence	Topical ASI Group	
	frequency	frequency
Not Infection	9	90
Infection	1	10
Total	10	100

Table 3 Distribution of the incidence of infection in the model of care common in infants milliarria

Infection incidence	Dried group open	
	Frequency	Percentage
no infection	6	60
infection	4	40
Total	100	100

Table 4. Tabel 2 x 2 statistical test results *Fisher,s Exaact Test*

Milliarria Care	Infection	No Infection	Total
Topical ASI	1	9	10
Non Topical ASI	4	6	10
total	5	15	20
Statistical Test	X ² =0,167 <i>Fisher' s Exact Test</i> p=0,303>0.05		

Skin is attacked milliarria observed every day and then recorded on the observation sheet of the signs of infection and carried out in collaboration with parent , midwife or care villages and researchers . The result is known in the model group topical treatments ASI that the incidence of infection occurs only 1 infant (10 %) .

Table 3 is known that 10 infants in the control group receive usual care models customary in milliarria in infants 2 times / day to 12 days . Skin is attacked milliarria observed every day and then recorded on a sheet of observation for signs of infection in collaboration with parents , midwife or care villages and researchers . The result is known in the usual care group models that the incidence of infection by four infants (40 %) .

Table 4 is known that 20 babies are grouped into 2, 10 breastfed infants receive topical treatments and 10 infants receive appropriate treatment kebiasaan ordinary day on the skin is attacked milliarria .. Observations incidence of infection carried to 2 days after hospitalization up to 12 days after. The results of observations incidence of infection were compared between treatment and control groups using the scale nominal data from two different groups. The results of the test data analysis with Fisher's Exact Test, the incidence of infection is known differences in the treatment group and control group obtained significant value $p = 0.303 > 0.05$ because there are two cells whose value < 5 , which means that H_0 accepted, it means there is no difference milliarria significant incidence of infection in the model group topical ASI with the usual model. The results of the study does not mean the model of nursing care topical no effect on the incidence of infection, clinically proven infectious disease model group care topical treatments ASI cord was 20% smaller than the incidence of infection from the two groups, while the risk of infection in the control group 0.167 times compared with the model of care topical treatments ASI

DISCUSSION

This chapter describes the discussion of research findings, according to the research objectives and the basic characteristics of respondents that could affect the study results. This study, researchers explain the application of the

model of care topical treatment of breast milk on the incidence of infection, as well as distinguishing the model of care ordinary care to take care of the baby in the Region milliarria Ponkesdes "BERSEMI" Source Porong subdistrict Lawang.

Respondents were divided into treatment and control groups, each group getting different interventions. The treatment group receive the intervention application of topical treatments ASI model of care developed by researchers, were the usual care control group without topical conducted daily. Both interventions are given for 12 days in the Region Ponkesdes "BERSEMI" Source Porong subdistrict Lawang. All models milliarria treatment begins after 2-3 days milliarria attack, subsequent treatment in milliarria after bathing is done 2 times / day, to the intervention group milliarria smeared breast milk alone without the other evenly, while the control group without topical or talc, baby oiely, care is taken for 12 days. Intervention and control groups were observed and recorded on sheets observation about signs of infection in infants milliarria 1 day after treatment until day 12.

This study, I explain the application of the model of care topical treatment of breast milk in milliarria on the incidence of infection, as well as distinguishing the model of care ordinary care in the Territory Ponkesdes "BERSEMI" Source Porong subdistrict Lawang.

The results based on Table 4.1 found that respondents in the treatment group was less 12 months as many as nine infants (90%), and a control group of age less than 12 months as much as 5 infants (50%), while the yield on the two groups attack milliarria largely on the age of the baby less than 12 months by 70%. The results of the study in accordance with the theory Amirudin (2003), that miliary often attack the baby, because a baby's skin structure thinner, bonds between the cells more vulnerable and delicate, and more sensitive, so the skin is susceptible to skin disorders and growth of pathogenic bacteria (Amirudin 2003). A 2006 survey of Iranian studies found an incidence of miliary much as 1.3% of the number of new births. Based on the study of WHO (World Health Organization) there are 80% of the world population affected by miliary, with the number of events 65% of whom were attacked in infants. Indonesia around 40% of

infants born to experience miliaria and ranks 7 out of 10 skin disease in infants and toddlers.

The results of the research that the majority of respondents in two groups that attack skin miliaria found on the baby's body parts 2-3 places 70% of the area of the head, neck, chest and abdomen (average 2.8 point). The results of the study in accordance with the theory that the baby, the lesions tend to occur on the head, neck and upper body, while in adults, the lesions occur in the body. Miliaria considered to be caused by blockage of sweat ducts, which causes leakage of sweat that comes out of the eccrine glands leading to the epidermis or dermis

Results of research miliaria attacked almost all the baby's skin and cause miliaria attacks suddenly and miliaria would seem to multiply during hot weather . This is consistent with the theory that the incidence of skin disease miliaria will increase to 50 % in the hot and humid summer boosted by baby skin care workers .The results of the study (Table 4.2) found the incidence of infection is shown in kelompok intervention fraction is 1 baby (10 %) , occurs in infants number 5 with a history of less than 12 months of age . Respondents had an attack miliaria almost all the baby's skin and causes the baby miliaria attack suddenly , and miliaria would seem to multiply during hot weather .

The results that respondents in the intervention group who experienced a skin infection miliaria attacks are on the 3rd place baby's body parts (75%), namely the head and face, neck, back showing the extent of the attack on the respondent miliaria number 5. The results consistent with the theory that the baby, lesions tend to occur on the head, neck and upper body, while in adults, the lesions occur in the body. Miliaria considered to be caused by blockage of sweat ducts, which causes leakage of sweat that comes out of the eccrine glands leading to the epidermis or dermis, with the extent of the attack on the baby's body parts it is at risk as a factor contributing to the infection.

The incidence of skin infections in infants who fell ill miliaria nursing care model group topical breast milk showed signs of infectious disease and get a score of more than 4 of 7 symptoms of infection (Attachment 12) and symptoms of skin infection that attacked miliaria include red skin, freckles cloudy, around the lesion

rupture and irritation. The results showed a score of 4, which means according to the theory that the mark-mark infection showed no incidence of more severe infections.

But the results of the study the incidence of infection in the intervention group showed that the cause of the attack miliaria suddenly, it is according to the theory that the characteristic of recurrent miliaria a complication of repeated episodes of Miliaria that can cause infection.

The incidence of infection of the research results in substantially lower than the intervention group of miliaria existing event data. The results of the children's clinic of data Poly RS Dr. Cipto Mangunkusumo throughout 2003-2008 by Titin, (2010), that the data on cases of skin disorders in infants and children including miliaria which accompanied a bacterial infection, including 10 large. Indonesia around 40% of infants born to experience miliaria and ranks 7 out of 10 skin disease in infants and toddlers.

Although the incidence of infection in breast milk model of care topical treatments are still there, but including the incidence of infection is low enough because breast milk contains many immunological and nonimmunological as anti-inflammatory and antimicrobial (Mullany, 2003). In 1998, WHO recommended to be developed and carried out research will use ASI. Despite the fact from the study intervention group had made efforts to *menghendalikan* factor expected to reduce the risk of the incidence of infection in accordance habits of parents in caring for children with bathing every day at least 2 times / day and use soap every day.

Although the research group found no infection of the risk factors as found in the theory that the miliaria may be infected , mainly due to infants who are malnourished or weak , developed into *periporitistafilokokus* involving expansion of the sweat ducts to the sweat glands .

Researchers can not control the factors that cause infection in miliaria because bacteria such as *Staphylococcus epidermidis* and *Staphylococcus aureus* , are thought to play a role in the pathogenesis of miliaria . Patients with Miliaria have 3 times more bacteria per unit area of the skin than healthy control subjects . Miliaria umumnya are asymptomatic who recovered without complications for a few days.

The results of the study (table 4.3) found the incidence of infection is shown in kelompok control as many as four infants (40%), occurs in infants numbers 5, 8, 9 and 10 with a history of age or less 12 months respectively 2 infants (50%). Respondents had an attack miliaria almost all the baby's skin and causes the baby miliaria attack suddenly, and miliaria would seem to multiply during hot weather.

The incidence of skin infections in infants who fell ill miliaria non topical ASI group showed signs of the incidence of infection by getting a score of 4- 5 of 7 symptoms of infection each - masing 2 infants (annex 12), and symptoms of infection include skin is attacked miliaria red skin, freckles - colored spots muddy, swollen, wet, around the lesion rupture and irritation. The results showed an average score of symptoms that occur 4.5, this means that according to the theory that the mark-mark infections showed the incidence of infection is more severe.

Facts in the study data showed that in the control group proved three babies (3) of the four infants an infection that non topical treatments (regular) with parents who still use the powder is more than three times the proven trigger infection. This fits the theory that other treatments such babies should always be given powder or talk constantly clogs the skin glands and will exacerbate the miliaria. Some studies of topical medications and antibiotics are not appropriate given local in miliaria not very effective and can sometimes increase the amount of miliaria (M Harahap, 2000). Despite the fact from the study control group made efforts to menghendalkan factor expected to reduce the risk of the incidence of infection in accordance habits of parents in caring for children with bathing every day at least 2 times / day and use soap every day.

The results of the study the incidence of infection in the control group showed that the cause of the attack miliaria sudden infant appoint 3 of 4 existing, it is appropriate that the theory that the characteristic of recurrent miliaria a complication of repeated episodes of Miliaria that can cause infection. The incidence of infection of the research results in the control group is still relatively high, it is compared to the results of research conducted by researchers and miliaria existing event data. The results of the children's clinic of data Poly RS Dr. Cipto Mangunkusumo

throughout 2003-2008 by Titin, (2010), that the data on cases of skin disorders in infants and children including miliaria which accompanied a bacterial infection, including 10 large. Indonesia around 40% of infants born to experience miliaria and ranks 7 out of 10 skin disease in infants and toddlers

Although the results of this study can not be found in the control group of the risk factors that cause infections in miliaria as contained in the theory that the miliaria may be infected, mainly due to infants who are malnourished or weak, developed into periporitistafilokokus involving expansion of the ducts of sweat through the sweat glands.

Researchers can not control the factors that cause infection in miliaria because bacteria such as *Staphylococcus epidermidis* and *Staphylococcus aureus*, are thought to play a role in the pathogenesis of miliaria. Patients with Miliaria have 3 times more bacteria per unit area of the skin than healthy control subjects. Miliaria umumnya are asymptomatic who recovered without complications for a few days, but recurrent miliaria a complication of repeated episodes of miliaria that can cause infection.

Another factor that may influence the occurrence of the infection, but researchers could not control was the type miliaria. Miliaria umumnya are asymptomatic who recovered without complications for a few days, but those who suffer from miliaria rubra tends to show symptoms, they can feel the itching and stinging. Anhidrosis develop in the affected area. In general condition, anhidrosis may be hyperpyrexia and heat. Secondary infection is another complication of miliaria rubra, it also appears as impetigo or multiple abscesses discrete known as periporitis staphylogenes. Miliaria profunda itself is a complication of repeated episodes of miliaria rubra. Lesions of miliaria profunda show no symptoms, but the discharge or excessive sweating (hyperhidrosis) of the face and armpits can evolve, as a result of eccrine ductal rupture.

Distinguishing between the incidence of infection is non-topical application of models of care with topical treatments ASI ASI

The results of the analysis of research data (Table 4.4) of both forms of care models miliaria treatment in infants with test Fisher's Exact Test, the incidence of infection is known differences in

the treatment group and control group obtained significant value $p = 0.303 > 0.05$ because there are two cells whose value < 5 , which means that H_0 accepted, meaning that there was no significant difference in the incidence of infection milliaris care model group topical treatment of breast milk in milliaris model non topical treatment (daily habit).

The results of the study does not mean the model of nursing care topical ASI no effect on the incidence of infection, clinically proven infectious disease model group care topical treatments ASI was 20% smaller than the incidence of infection than to the control group, while the risk of infection in the control group 0.167 times large model of care compared with topical treatments ASI

The incidence of infection was not significant because there are factors that can not be controlled as a factor the presence of antibodies in the baby's body to fight infection among infants with one another is different. so that the clinical response against invading bacteria are different. The methods of assessment only on the incidence of infection indicators of physiological responses as signs of infection are observed, should be diagnostic of infection not only physiological responses, but the biochemical indicators that culture examination would be more accurate.

Although these results were not significant in both groups, the model of care topical treatment of breast milk with usual care on the skin is attacked milliaris, but the results show that the model group care topical treatments ASI rate of infection was lower than the model group usual care or day-to-day. The incidence of infection topical treatment care models lesser breastfeeding because breast milk contains many immunological and nonimmunological as anti-inflammatory and antimicrobial (Mullany, 2003). In 1998, WHO recommended to be developed and carried out research will use ASI. Non immune protection provided by a large number of components in breast milk that protect in a non immune thus provide a broad anti-infective activity and protect the mucosa against pathogens and bacteria attached (Roitt 2003). Breast milk contains many protective substances in the form of cellular components, immunoglobulin and non-immunoglobulin are on proktesi against bacteria,

viruses, fungi, and protozoa. Breast milk should be used to prevented or infection in infants.

Compared to the control group proved to parents who still use the powder is more than 3 times proven to trigger an infection. This fits the theory that other treatments such babies should always be given powder or talk constantly clogs the skin glands and will exacerbate the miliary. Some studies of topical medications and antibiotics are not appropriate given local in miliary not very effective and can sometimes increase the amount of miliary (M Harahap, 2000).

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the data and discussion , it can be concluded that the model of care topical treatment of breast milk in milliaris can reduce the incidence of infection in infants than non- topical treatment care models (custom)

Suggestion

Considering the results, the researchers gave the following advice:

1. Parents are expected to believe that the baby care model of topical treatments in breast milk can be used as a substitute milliaris proven effective and safe topical treatments than non-topical milliaris ASI. Parents are able to apply and adhere to the standard of care milliaris already delivered well, and parents can work independently to learn, especially maintenance milliaris by looking for either oral or written information to health workers in formal and non-formal.
2. For health workers can try a topical application of a care model milliaris milk to the baby. Efforts to increase knowledge officer infant care service providers either through discussion or training, particularly regarding milliaris treatment with topical breastfeeding infants. As well as using new methods that have proven effective milliaris treatment can decrease the incidence of infection as well as cost-effective and safe because milk is easily available, free and sterile.

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THE EFFECT OF OXYTOCIN MASSAGE ON BREASTMILK PRODUCTION POSTPARTUM MOTHERS IN PETERONGAN PHC AREA, JOMBANG, EAST JAVA, INDONESIA

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ABSTRACT

Background: Breastmilk in early life was an effective intervention in saving lives of newborns and could prevent 13-15% of 9 million deaths of children underfive years old. Rate of breastfeed in world was lack, between 20-40%. There were many breastmilk of postpartum mothers not smooth at one week postpartum and breastfeed blockage incident that required mothers breastcare each month. One effort to improve breastmilk production with early intervention in postpartum mothers by stimulating oxytocin hormone, one of them with oxytocin massage. **Aim:** This study conducted to evaluate effect of oxytocin massage on breastmilk production postpartum mothers. **Study Design:** This study utilized simple post test design. The intervention was oxytocin massage. **Samples:** Population of this study physiologic postpartum mothers. Sample were collected with consecutive non-probability random sampling, involving 100 total samples. **Results:** It was found that 72% of participants were 20-35 years old, 84% housewives, and 66% multiparas. The most important findings of study were following 58.1% postpartum mothers with oxytocin massage were significantly improved after treatment (Fisher Exact Test, p value= 0.006; OR= 3.765; CI 1.410-10.051) **Conclusion:** This study proved that oxytocin massage could improve breastmilk production. Oxytocin massage, massage therapy of spine in costa 5-6 to scapula would accelerate work of parasympathetic nervous system stimulates posterior pituitary to secrete oxytocin. Sustainability production of oxytocin hormone needs to be further investigated. The result can be used as basic policy of lactation management and exclusive breastfeeding promotion education programs in health services and community.

Keywords: *oxytocin massage, breastfeed, breastmilk, breastfed, postpartum*

INTRODUCTION

Breastmilk is a unique product given to human being by nature to fulfill all requirements of the offspring until it is mature enough to take adultfood. Its uniqueness lies in ability of mother to produce milk which will vary in quantity, quality and consistency depending on age of baby, maturity and timing of feed. It has not been possible to achieve this with any other type of milk, even with state-of-the-art modifications using most advanced technology.

Exclusive breastfeeding is one of the efforts to reduce infant mortality rate, less milk production becoming one of factors mother did not breastfeed exclusively (Shankar, 2015).

Breastmilk not only provides easily digestible and specifically needed amounts of nutrients, water, minerals and vitamins but also several other benefits to both mother and baby. There are some benefits for baby such as (1) Reduces

infections through “priming” of baby’s immune system, specifically diarrhoea due to E coli, rotavirus, Shigella, campylobacter etc, reduces incidence of respiratory tractinfection, reduces late onset sepsis in low birthweight (LBW) babies, (2) Effect on better neurodevelopment and IQ, (3) Reduces risk of sudden infant death syndrome (4) Provides analgesia for baby during painful procedures, (5) Long-term diseases like type I diabetes mellitus, hypercholesterolaemia, hypertension, obesity and asthma have been found to be lessin babies who were exclusively breastfed during first 6 months (Dieterich, Felice, O’Sullivan, & Rasmussen, 2013; F. R. Hauck, Thompson, Tanabe, Moon, & Vennemann, 2011; Horta, de Mola, & Victora, 2015; Ip et al., 2007; Joan L. Luby *et al.*, 2016; Johnston, Landers, Noble, Szucs, & Viehmann, 2012; Stuebe, 2009; Yan, Liu, Zhu, Huang, & Wang, 2014).

On the other side, benefits for mother (1) Reduces postpartum bleeding, (2) Reduces menstrual blood loss, (3) Helps with child spacing attributable to lactational amenorrhoea, (4) Reduces obesity, (5) Reduces risk of breast cancer and ovarian cancer, (6) Promotes bonding between mother and baby, (7) Reduces stress response, inflammation, and postpartum depression, (8) Convenience of feeding the baby on demand irrespective of time or place, (9) Economical (Sukhee Ahn *et al.*, 2015).

Since 2001, WHO guidelines have stated that babies should be exclusively breastfed until they are six months old – something most mothers and babies are physically able to do. In the crucial first few months, breastfed children are six times more likely to survive than children who are not breastfed. Yet globally only 36% of infants younger than six months are exclusively breastfed, and in developing countries poor feeding practices – including lack of exclusive breastfeeding until six months and failure to initiate breastfeeding in first hour – contribute to the deaths of 800,000 children under five years of age each year (Shetty, Priya, 2014).

The World Health Organization (WHO) recommends exclusive breastfeeding as an important strategy for reducing child deaths, particularly in developing countries. Exclusive breastfeeding is defined as feeding the child nothing but breast milk for the first six months (no foods or liquids including water). After 6 months, breastfeeding is still encouraged, along with the introduction of other foods and liquids. It is also recommended that mothers feed their newborns colostrum, as the first feed immediately after birth. Exclusive breastfeeding confers a number of protective benefits for children and mothers. For example, a longer duration of breastfeeding promotes sensory and cognitive development, protects infants against infectious and chronic diseases, and reduces infant mortality resulting from childhood illnesses such as diarrhea and pneumonia (American Academy of Pediatrics, 2012; Horta, Bahl, Martines, & Victora, 2007). Coverage of exclusive breastfeeding was targeted by Ministry of Health RI to reach 80%. The target is very difficult to achieve. Studies showed that exclusive breastfeeding rate in Indonesia are very low. The Indonesian Demographic and Health Survey had collected data on infant feeding practice for each of the

children born in five years preceding the survey. A great majority of children ever had breastfeeding (96-97%), and more than half started within first day. The median duration of breastfeeding was estimated at 23.9 months. Among infants under 4 months, 53% were exclusively breastfed, and the median duration of exclusive breastfeeding was 1.7 months (Fikawati & Syafiq, 2009).

Lactation management is all that needed to support successful breastfeeding so baby can be fed properly. The goal of management is to increase the use of exclusive breastfeeding until the baby is 6 months old, with affection facilities. Lactation Management begins during pregnancy (antenatal), immediately after birth (prenatal) and the postpartum period (post-natal).

Breastmilk in early life was an effective intervention in saving lives of newborns and could prevent 13-15% of 9 million deaths of children under five years old. Rate of breastfeed in world was lack, between 20-40%. There were many breastmilk of postpartum mothers not smooth at one week postpartum and breastfeed blockage incident that required mothers breastcare each month. One effort to improve breastmilk production with early intervention in postpartum mothers by stimulating oxytocin hormone. Efforts to facilitate breastfeeding can be done by massage oxytocin (Resty, 2014). Multiprofessional team must support and encourage exclusive breast feeding in almost all patients, and motivate mother keep breast feeding for at least 6 months (F. Teixeira *et al.*, 2015). This study conducted to evaluate effect of oxytocin massage on breastmilk production postpartum mothers.

RESEARCH METHOD

This research is quation experiment with consecutive non probability randomized. The intervention was oxytocin massage. After treatment, evaluate effect of oxytocin massage on breastmilk production postpartum mothers.

Population of this study physiologic postpartum mothers. Sample were collected with consecutive non-probability random sampling, involving 100 total samples (n control= 50). It was conducted in four Midwife Clinic (MC) of Peterongan Public Health Centre Area (Umi Salamah MC, Devi MC, Sanik MC, Ega MC), with inclusion criteria (1) First day post partum mother (2) Babies

who are not fed milk formula at the time of study (3) Good suction reflexes (4) Weight of baby $\geq 2,500$ g (5) Mother and baby treated in one room (rooming in) (6) Mother did not smoke (7) Condition of mother and baby healthy (8) The shape of the nipple both normal breast. Exclusion criteria of study (1) Babies born died (2) Mother had a high fever (3) Breast abnormalities

Closed-questionnaire needs to measure oxytocin massage on breastmilk production postpartum mothers which is filled with researcher and enumerator.

Fisher Exact Test were used to compare data after oxytocin massage treated. How

hypotesis concluded thus are used with comparing p value (probability) with α value on confidence interval 95% ($\alpha = 0,05$). Zero hypotesis (H_0) denied or alternative hypothesis (H_a) accepted if p value smaller than α value ($p < 0,05$).

RESULT

It was found that 72% of participants were 20-35 years old, 84% housewives, and 66% multiparas.

Table 1. Distribution postpartum mother

Variables	Number		Percentage	
	Control	Intervention	Control	Intervention
Age				
<20 years	7	2	77.8	22.2
20-35 years	29	43	40.3	59.7
>35 years	14	5	73.7	26.3
Education				
Elementary-Junior High School	6	13	31.6	68.4
Senior Highr School	44	34	56.4	43.6
Academy/Collage	0	3	0	100
Activity				
Working	11	5	68.8	31.2
Housewife	39	45	46.4	53.6
Parity				
Primiparas	14	18	43.8	56.2
Multiparas	36	30	54.5	45.5
Grandmultiparas	0	2	0	100
Gestational age				
Premature	1	0	100	0
Aterm	49	47	51	49.0
Postdate	0	3	0	100
Infants birth weight				
<2500 g	6	0	100	0
≥ 2500 g	44	50	46.8	53.2

*Totals 100 mothers

Table 2. Distribution breastmilk production

Variables	Number		Percentage	
	Control	Intervention	Control	Intervention
The main indicators of infant				
Weight gain				
Stagnant or <200g	37	23	61.7	38.3
200g	13	26	33.3	66.7
>200g	0	1	0	100
Other indicators of infant				
Duration of feeding				
<20 minutes	19	15	55.9	44.1
20-30 minutes	31	27	53.4	46.6
>20 minutes	0	8	0	100
Frequency of feeding				
<8 times/24 hours	15	14	51.7	48.3
8-12 times/24 hours	35	21	62.5	37.5
>8 times/24 hours	0	15	0	100
Frequency of urinary				
<6 times/24 hours	10	5	66.7	33.3

6-8 times/24 hours	38	26	59.4	40.6
>8 times/24 hours	2	19	9.5	90.5
Frequency of sleep				
<2 hours	9	3	75	25
2-3 hours	37	23	61.7	38.3
>3 hours	4	24	14.3	85.7

*Totals 100 mothers

The postpartum mothers 74% had smooth breastmilk production. It appears from the main indicators on infant breastmilk

production (weight gain) and other indicators (duration of feeding, frequency of feeding, urinary, and sleep).

Table 3. Breastmilk production after axytocin massage

Breastmilk production after axytocin massage	N	%
Smooth breastmilk production	74	74
Not smooth breastmilk production	26	26
Total	100	100

Diagram 1. Breastmilk production after axytocin massage

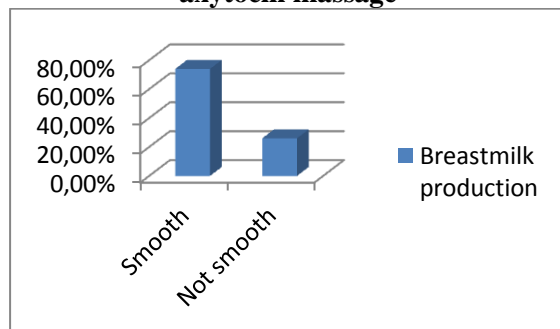


Diagram 2. Differences breastmilk production

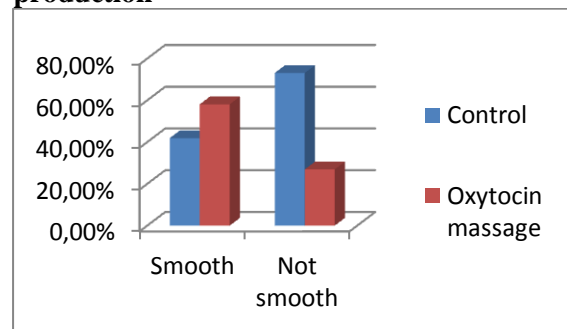


Table 4. Differences breastmilk production between control and intervention group

Breastmilk production	Control		Intervention	
	N	%	n	%
Smooth breastmilk production	31	41.9	43	58.1
Not smooth breastmilk production	19	73.1	7	26.9
Total score	50		50	
CI	1.410		10.051	
OR	3.765			
Fisher exact test	P= 0,006 (p < 0,05)			

The most important findings of study were following 58.1% postpartum mothers with oxytocin massage were significantly improved after treatment (Fisher Exact Test, *p* value= 0.006; OR= 3.765; CI 1.410-10.051)

DISCUSSION

Oxytocin massage one of treatment help postpartum mothers to improve breastmilk production with early intervention by stimulating oxytocin hormone. Massage therapy of spine in costa 5-6 to scapula would accelerate work of

parasympathetic nervous system stimulates posterior pituitary to secrete oxytocin.

Before treatment midwife give health education about lactation, exclusive breastfeeding, mother's confidence related to come out breastmilk at least, baby loving, husband support, how to increase breastmilk, how to prevent from scuffed nipple, duration of exclusive breastfeeding, bonding definition, attachment breastfeeding, success effort of breastfeeding, oxytocin massage techniques, breastmilk storage, breastfeeding durability in the refrigerator, breastfeeding durability in separate

freezer and not separated freezer, room temperature and type of milk.

Steps of oxytocin massage, open clothes, wear towel, pour hands with baby oil, massage of spine in costa 5-6 to scapula 2-3 minutes, wipe mother's back with towel (warm water-cold water alternately).

Sustainability production of oxytocin hormone needs to be further investigated. The result can be used as basic policy of lactation management and exclusive breastfeeding promotion education programs in health services and community.

CONCLUSION

This study proved that oxytocin massage could improve breastmilk production. However, the sustainability of the change breastmilk production needs to be further investigated. The result can be used as the basic policy of lactation management and exclusive breastfeeding promotion education programs in the community

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Disclosure

The authors report no conflicts of interest in this work.

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EFFECTIVENESS OF APPLYING BREASTFEEDING/MILK ON UMBILICAL CORD TO HASTEN UMBILICAL CORD REMOVAL COMPARED TO ETHANOL AND DRY CARE OF NEWBORN: LITERATURE REVIEW

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ABSTRACT

An umbilical cord infection is the important morbidity and mortality cause in many countries (incident : 55-197 per 1000 live births (ganatra and zaidi, quoted in Allam 2010, 2015). About 3.3 million of neonatal deaths around the world, every year. Oestergaard et al (2011) reported more than 30 % is caused by infection. Some of the infections are started by the umbilical cord infection. The umbilical cord is very nice for growing some benefit and harmful microorganisms (dangerous : clostridium tetany). The incident of omphalitis in low income countries is very rare, the data showed the risk ranged between 2 and 77 per 1000 live births in hospital setting, mortality rate is between 1 % adults and 15 % depend on the definition of omphalitis used (Mir, et al .2011 quoted in Allam, 2015). The aim is to describe the effectiveness of applying topical breastfeeding/milk on umbilical cord to shorten the umbilical cord removal compared to ethanol and dry care of the newborn. Articles are obtained from *Google Scholar, Doaj, Ebsco, ProQuest, Journal of Nursing Science from 2011 up to 2015*. In conclusion the applying topical breast milk on the umbilical cord can shorten the umbilical cord removal and reduce the umbilical cord infection compared to ethanol and dry care.

Key words: a newborn baby, the umbilical cord, topical breast milk, ethanol, dry care

INTRODUCTION

The umbilical cord infection has high contribution in newborn morbidities and mortalities in many developing countries, due to poor of hygienic care. The World Health Organisation predicted that 4 million children died every year during neonatal period, the most incidents occurred in developing countries (mahrous dkk, 2012). The umbilical cord infection is the important morbidity and mortality cause in many countries (55-197 per 1000 live births (ganatra and zaidi, 2010 quoted in Allam, 2015). Around 3.3 million neonatal deaths around the world every year . Oestergaard et al (2011) reported more than 30 % is caused by infection. Some of the infections are started by the umbilical cord infection. The umbilical cord is very nice for growing some benefit and harmful microorganisms (dangerous: clostridium tetany). The omphalitis incident in low income countries is very rare, the data showed the risk ranged between 2 and 77 per 1000 live births in hospital setting, mortality rate between 1 % adults and 15 % depend on the definition of omphalitis used. (Mir, et al .2011 quoted in Allam, 2015).

One of infections commonly occurs during neonatal period and causing high mortality is tetanus neonatorum. This disease is caused by clostridium tetany goes through the umbilical cord wound. This is may be due to the poor of care and procedur, for example cutting the umbilical cord using unsterile scissors or putting some spices on, or after cutting the umbilical cord they put some ashes, soil, oil and some leaves (Hassan & Alatas, 2007 quoted in sofiana, 2011).

Correct care of the umbilical cord is an effort to prevent neonatal infection. So many methods are used, for example modern method by using antiseptic such as alcohol 70 %, povidon iodine (betadine) 10 %, for traditional method by using honey, ghee oil (India) , or colostrum (Sofiana, 2011). In some countries, umbilical cord infection cases are treated by using aseptical technique. Many cultural practices and faith concerned to the treatment of the umbilical cord included applying topical breastfeeding/milk. Some reports showed applying topical antiseptic shortening umbilical cord removal compared to dry care or non antiseptic treatment. The treatment costs varies according to the method

and the length of hospitalisation. Hence, it is important to find cheap alternative care ; for example breastfeeding/milk especially for low income countries (Mahrous dkk, 2012).

Factors delaying the process of umbilical cord removal is the application of antiseptic for the caesarean operation. Umbilical cord removal is delayed because of normal flora damaged around it and decreasing of leukocytes number in it (Whaley, et al 2003 quoted in Allam, 2015). Zupan, et al (2004 quoted in Allam, 2015) a meta-analysis of the of twenty-one (21) study involving 8.959 participants to assess the effects of topical in preventing the umbilical cord infection, disease and death. The researchers found that there was no benefit in using of antibiotics or antiseptic, it's just keeping the umbilical cord clean and dry. They said that using of antiseptic actually prolong the time of the umbilical cord removal. Breast milk containing a large amount of antibodies IgA, it seems to have effect of preventing of skin infection (Kramer et al, 2001 quoted in Allam, 2015). Also breast milk seems to have effect of antibacterial, antiviral, supporting body immune, promote recovery and musculoskeletal growth as well. Human breast milk is a source of two classes main growth factors, named alpha transformation and beta growth factor (TGF-A and TGF-B) and insulin-like growth factors 1 and 2 (IGF-1 and IGF-2) (Ginjala & Pakkanen, 2001 quoted in Allam, 2015). This growth factor supports muscle, cartilage repair and wound healing (Wilson, 1998 quoted in Allam, 2015). TGF-A and TGF-B taking position in normal cell activities for example embryo development, cell proliferation and tissues healing. IGF-1 is called anabolic and wound healing characteristics. Slow down catabolism, and it is one of growth factors that can stimulate muscle growth and repair by itself. As recommended by Mousa. et al (2006 quoted in Allam. 2015). Describing that one of the agents used in umbilical cord care is applying breastfeeding/milk and distilled water. Applying breastfeeding/milk on umbilical cord site is one of the cultural practice of the umbilical cord care used in turkey. According to WHO, this is very useful as a tool to see that antibacterial presents in breastfeeding/milk also having many immune agents and anti infection. Significantly, colostrum containing a number of components acts as an agent of

natural anti microba and also protector factor giving specific and nonspecific passive immune. Vural and Kisa (2006 quoted in Allam, 2015) reported breast milk hastening complicated processes of the umbilical cord removal by leukocytes polymorphonuclear presented in the umbilical cord, an enzyme photolytic and other immune compound. Previous study reported the duration of umbilical cord removal by applying topical breastfeeding/milk and dry care is shorter than applying topical povidone iodine. Dore et al, (1998 quoted in Allam , 2015) reported the umbilical cord dry care in a newborn is proven. Vural and kisa (2006 quoted in Allam , 2015) did pilot study comparing the use of povidone iodine (betadine), breast milk and dry care. They concluded that the umbilical cord dry care and topical breast milk linked to the duration of umbilical cord removal compared to the care using povidone iodine. The umbilical cord usually getting dry, epithelializes and removed with in 15 days, in short, the evidence shows the use of the umbilical cord dry care or drying by nature of a new baby born. The recommended practice leads to the shorter time of umbilical cord separation/removal without infection (Broom and Smith, 2012). The umbilical cord infection has to be prevented in many cases (Capurro, 2004). It is important to identify the best umbilical cord care to reduce neonatal mortality and morbidity rate also as an offer alternative for people practicing high risk traditional care.

Understanding evidence based in the form of literature review about the effectiveness of applying topical breastfeeding/milk on umbilical cord to hasten umbilical cord removal compared to ethanol and dry care of a newborn.

METHOD

The method used in this literature review first of allis proceeded by choosing the topic, then determining keywords to search English and Bahasa journals through Google Scholar, Ebscho, ProQuest and Journal Nursing Science. And it's restricted only from January 2011 up to October 2015. English Keywords used are "breastfeeding and umbilical cord", "ethanol and umbilical cord", "dry treatment and umbilical cord", "umbilical cord and infection", "umbilical cord and treatment care". In Bahasa Indonesia

keywords used are “*perawatan tali pusat, infeksi, ASI dan ethanol*”.

RESULTS

This literature review examines of six true experiment journals to identify the effectiveness of topical breastfeeding/milk on the umbilical cord to hasten umbilical cord removal compared to ethanol and n dry care of newborn. Study conducted by Mahrous, et al. (2012) using quasy experimental design. This study involving 100 newborn babies. Then divided into 2 groups. 50 babies as a treatment group and 50 babies as a control group. Intervention for the treatment group is applying topical breastfeeding/milk 3 times a day or every eight hours. Then for the control group is applied ethanol with the same frequency. As a result applying breastfeeding/milk is hastening the umbilical cord removal (4.3 ± 1.4 days) compared to ethanol (8.2 ± 2.2 days). Omphalitis signs and complication are much better in treatment group compared to control group. According to this study also written a significant difference between two groups with TVC specimens collected from the rest of the umbilical cord. Organisms isolated included *S. epidermidis*, *S. aureus*, *Micrococcus*, *E. coli* and *Klebsiella* species, are found in greater number of pathogenic species in the ethanol group and less number of bacteria in treatment group.

Reinforced by Aghamohammadi study, et al (2012) this study is randomized clinical trial with 130 newborn babies in Ghaemsiyahr Razi Hospital 2010. The result is showing that by controlling influencing intervener variables, the average time of the umbilical cord removal of treatment groups significantly shorter than control group of care (dry care), therefore the median of the umbilical cord of treatment group is 150,95 (28,68) hours and 180,93 (37,42) hours for the control group.

Research conducted by Allam, et al (2015) true experimental design study. This study is conducted in The Ain Shams University Hospital and in the Tertiary Hospital Al Riyadh Saudi Arabia involving large samples 400 newborn babies by using simple random sampling technique. It was conducted for 19 months from June 2013 up to December 2014. Sample is divided into 2 groups, treatment group is given topical

breastfeeding/milk and dry care control group. The result of the umbilical cord removal between treatment and control group are 80% of the treatment group removed on 4th and 5th day and only 20% of the control group removed on 5th and 6th day. On the other hand, in the control group only 11 (3 %) removed on 5th day and 75 % removed on the 7th day and more. This is as a prove that treatment group and control group are having normal bacteria colonization 95 % and 94 % that is normal *Epidermis Staphylococcus*. 5 % to 6 % of neonates having light fever and light redness. Pathogenic organisms, only 2 % in treatment group (*Escherichia Coli* and *Staphylococcus Aureus*) compared to 2 % and 4 % in dry care control group.

Research conducted by Glosan and Hossein (2013), it was conducted between March and September 2010, by involving 300 sample in Shahid Sadoughi University Hospital. Then divided into three groups, first group is for applying topical breastfeeding/milk, second group for applying ethanol and third group is for dry care only. Respondents are visited on the third and seventh day. Then followed up via telephone and visitation till the umbilical cord is removed. Average time of the umbilical cord removal is having a significant difference among three groups ($p < 0.0001$). Among the babies, the fastest separation the umbilical cord is on third day and the longest is on 15th day. The duration of the umbilical cord removal for first group and second group are having significant difference ($P < 0,0001$) and third group ($P < 0,003$). For Omphalitis does not have a significant difference among three groups. They have only 1 (1 %) neonates in third group and 2 (2 %) neonates in second group, and there is no one in first group having omphalitis. Mother of 4 (4 %) neonates in the first group, 3 (3 %) neonates in the second and 3 (3 %) neonates in the third group applying antibiotics. There are no significant differences among three groups.

Research conducted by Pujar, Dheepa, Francis (2013) using true experimental design, post test only with control design. Involving 60 newborn babies as sample. Divided into 2 groups, treatment and control group by using simple random sampling Technique. The result for the treatment group is having dry umbilical cord and in the control group is only 3 respondents having the same condition on the

4th day of the observation. 23 babies in treatment group showed of removal umbilical cord on 4th - 6th day after being applied by topical breastfeeding/milk then in control group only 9 babies.

Research conducted by sofiana and agustina (2011) using cross sectional true experimental design. This research is comparing umbilical cord removal duration using colostrum and dry gauze in Mrs. Endang Purwaningsih and Mrs. Istiqomah BPS in Kecepit subdistrict, Banjarnegara regency, Indonesia. Involving 40 babies as sample taken from 93 babies as population, then divided into treatment and control group by using simple random sampling (lottery technique). For the treatment group result showing the fastest umbilical cord removal is 54.83 hours, the longest is 170.50 hours and most of them 94.23 hours. Then for the fastest in control group is 77.00 hours, the longest is 231.67 hours and the average is 128.94 hours. Statistically this study used "T" test because the researcher distinguishing 2 unrelated sample. The result showed $p = 0,006$ that's smaller than α ($\alpha = 0.05$, meaning H_0 is rejected).

DISCUSSION AND IMPLICATION

Study of the effect of applying topical breastfeeding/milk on the umbilical cord removal, omphalitis, and bacteria colonization compared to 70% ethanol showed that the average time of umbilical cord removal is shorter (4.3 ± 1.4 days) compared to ethanol (8.2 ± 2.2 days). Omphalitis sign and complication are less or very rare in treatment group. Significant difference is found between two groups by taking TVC specimens collected from the rest of the umbilical cord. Isolated organisms included *S. Epidermidis*, *S. Aureus*, *Micrococcus*, *E. Coli* and *Klebsiella* species, and greater number of pathogenic species is found in control group. Some reports used topical breastfeeding/milk for umbilical cord care but they compared it to 96 % alcohol in one study, and only one study examining the effect of breastfeeding/milk in the umbilical cord colonization found different microorganisms (Sawardekar, quoted in mahrous 2004, 2015).

Mahrous (2015) said statistically decrease of TVC number in treatment group compared to control group at the first and second visit. This is may be caused by

breastfeeding/milk anti infection components. Paes and Jones reported by using alcohol showed increasing bacteria colonization dramatically, soon after starting the procedure by using alcohol. According to WHO, applying topical breastfeeding/milk on umbilical cord is one of nursing practices held in turkey, it's very useful in learning antibacterial factors in breastfeeding/milk (WHO, 2006). This is very useful as a tool to see that antibacterial presents in breastfeeding/milk also having many immune agents and anti infection. Significantly, colostrum containing a number of components act as an agent of natural anti microba and also protector factor giving specific and nonspecific pasive immune (Mohammadzaeh, 2008). Breastfeeding/milk also contain IgA contributes better action than ethanol. Colostrum is rich of IgA, leukocytes, and infection fighting substance produced by the mother in few days after delivery (Kelly, quoted in Mahrous 2000, 2015).

IgA in colostrum and breastfeeding/milk is very effective protecting the baby from any infection, preventing foreign proteins absorption when IgA is not released/formed yet. IgA comes from plasma cells in laminae propia and lymphs under GI tract mucous layers but for the first weeks does not produce any IgA (Walker & Hong, 2009). Because all of it the baby will be in the safe condition from any infection (viral, bacteria, parasite, antigen)

CONCLUSION

Applying topical breastfeeding /milk on newborn the umbilical cord hastening the umbilical cord removal compared to ethanol and dry care, reduce the risk of infection as well by decreasing numbe of pathogenic organisms commonly cause infection (TVC). It helps saving more money because of infection will consume a lot of money for caring and culturing.

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EFFECT OF SOCIAL SKILLS TRAINING (DRAMATIC PLAY) TO DECREASE THE STRESS HOSPITALIZATION PRESCHOOLERS 4-6 YEAR WITH MODEL APPROACH INTERPERSONAL PEPLAU

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ABSTRACT

Introduction: Hospitalization is a process that requires the child to an emergency hospital stay. Based on the results of preliminary studies in hospitals Syarifah Ambami Rato Ebu Bangkalan was shown all of the children in stress reactions hospitalization. the purpose of the study want to determine the differences of hospitalization's stress when were given social skills training therapy (dramatic play) for children who aged 4-6 years with model approach interpersonal peplau before and after. **Method:** the research design used pre experimental design and the one group pretest-posttest with variable stress of hospitalization and administration dramatic play. the study population and sample as many as 15 children were taken as many as 15 children in rom Irna E a hospital Syarifah Ambami Rato Ebu Bangkalan. Sampling technique used Random Sampling. While the date collection tool uses a check list observation with statistical test Wilcoxon Match Pairs Test. **Result:** Based on the statistical test of Wilcoxon signed ranks test, p Value: $0,001 < \alpha: 0,05$ so, H_0 rejected. This show that there were a difference of stress hospitalization play therapy given before children dramatic play as many as 12 children experience stress was being given, after where as the dramatic play as many as 8 children who do not experience stress. **Discussion:** Based on the results of the study suggested the paramedic and parents to provide therapeutic play (dramatic play) as an alternative to help lower the stress levels of hospitalization for children who aged 4-6 years at RSUD Syarifah Ambami Rato Ebu Bangkalan.

Key words: social skills training therapy (Dramatic Play), Hospitalization Stressing, Interpersonal peplau

SLEEP QUANTITY ASSIGN DEVELOPMENT GROSS MOTOR PROGRESSION OF PRESCHOOL

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ABSTRACT

Introduction : Sleep is the senseless condition where the person could be awakened by the stimulus or sensory and there were response less to the prickle which came out from the outside. The huge muscles and whole parts of the body were used by children to move their body. This study aims to know the correlation between sleep quantity and motor progression of pre-school in early childhood Mekarsari Surabaya. **Method :** The design of this study was Cross Sectional with Simple Random Sampling approached that consists of 44 respondents. The independent variable was sleep quantity for pre-school and the dependent variable was motor progression for pre-school. The data and instrument of the study used observation sheet. Spearman rho ($p < 0,05$) was used to analyzed the data. **Result :** of this study could be concluded that there was significant difference between sleep quantity and motor progression of pre-school in early childhood Mekarsari Surabaya. It could be seen in Spearman rho ($p = 0.013$). The children who have fullfiled sleep quantity indicated normal motor progression. However, children who have unfullfiled sleep quantity indicated short motor progression. **Discussion :** The implication of this study suggests that there were correlation between sleep quantity and motor progression of pre-school. Thus, the normal sleep quantity needs to be maintained in children's motor progression.

Key words : sleep quantity, pre-school (age: 3-6), motor progression

INTRODUCTION

Childhood is the rapid development and changes in many aspects of development (Yusuf S, 2009 in Andrianty, 2012). The development is the increased ability in the structure and function of the body is more complex in a regular pattern and can be predicted, as a result of the maturation process (Bahiyatun, 2011 in Niluh, 2013). The development of gross motor movement, namely the aspects related to the movement of body posture and usually requires effort, because it is done by the muscles bigger (Soetjningsih, 2003).

One of the problems in the development of preschool children include sleep disorders (Potter & Perry: 2009). At preschool children sleep about 12 o'clock at night and rarely nap. At the time of this common sleep disorder. These disorders may include sleeplessness, nightmares, and perform a ritual long sleep before going to bed.. Currently many preschool children who are not able to meet the needs of the bed according to the needs of sleep in general and delayed motor development.

A research Institute of Health in the United States reported that about 84% of children aged 1 to 4 years old suffer from sleep disorders, while in Indonesia based on a survey that was held approximately 51.3% of children aged under five preschool proven experience sleep disturbances (IDAI, 2008 in Narendra 2002). Results Sekartini (Member of Indonesian Pediatric Association in Yolanda, 2013) also said the number of countries in the Chinese study said 23.5% of preschool children 3-6 years have a sleep disorder, in Switzerland there are 20% of children aged 3 years awakened every night. In 2004-2005 in five major cities in Indonesia getting as much as 72.2% of parents assume sleep problems in children is not a problem or just a minor problem (IDAI, 2008in Narendra 2002). From the preliminary study conducted in early childhood Mekarsari RT 04 RW 01 Gunungsari Surabaya from interviews with mothers showed sleep quantity 10 (10%) of the children with the following criteria: the child needs to sleep > 11 hours (3%) and children with sleep needs <11 7 o'clock%).

Many activities carried preschool children (3-6 years) need to sleep about 11 hours a day. However, not all children of preschool age (3-6 years) are able to meet the needs rest and sleep. During sleep many hormones that are produced such as growth hormone (Growth Hormone). In the first 5-year phase known as the "Golden Age" (the golden period), where this phase is an important period in the development of the child. The growth hormone is very important in this period where children can look development and growth. Children who are good development can be seen from motor development, such as jumping, standing with one foot, hopping with alternating feet and active involvement in daily activities (IDAI, 2008 in Narendra 2002)..

Gross motor development is one important factor in the whole development of the individual. The muscles of the body tend to be better at this time. Physical growth experienced by the child will affect his motor. Motor development means the development of physical control through nerves, nerves, and muscles are coordinated. Most of the time spent with the children moving and moving these activities will be using muscles that exist in the body (Wahyudin and Agustin, 2011 in Ernawati, 2013).

Sleep disorders in preschool children can affect their motor activity where children will become apathetic, easily cranky, confused and suspicious, feel like talking, feeling unwell, feeling excessive sleepiness. Sleep problems should receive appropriate treatment, and the most effective strategy is read fairy tales help the child to calm down, help the child to have a healthy sleep pattern and help speech and language development of children.. The quality and quantity of sleep that will either make a child more productive and enjoy their activities the next day.

METHOD

The design of this study was observational analytic with cross sectional approach. The population of this research are preschool aged 3-6 years who were present in early childhood Mekarsari Surabaya on May 9, 2015 which amounted to 45 respondents. Samples of this study were all preschool children aged 3-6 years who were present on May 9, 2015 that include the criteria of 40 children, with the inclusion criteria, namely:

preschool children (3-6 years), preschool are healthy, do not have nutritional deficiencies, not under the influence of drugs, and willing to become respondents. The sampling technique that used was simple random sampling. The variables studied were sleep quantity and gross motor development of preschool (3-6 years). Collecting data in this study using a questionnaire with closed-question form, the observation sheet DDST II, and the observation sheet quantity of sleep. A questionnaire was given to the mother as the respondent must be answered in what the experienced. DDST II observation sheet used researchers to measure gross motor development of children, and the observation sheet sleep quantity and sleep early to know how long the child slept in 24 hours.

RESULT AND DISCUSSION

Result

Based on the results of children with quantity of sleep fullfilled are 12 respondents (30%) and children with quantity of sleep Unfullfilled are 28 respondents (70%).

Based on the results of the study in children with sleep quantity unfullfilled 28 respondents (70%) of these respondents reside alongside a highway and (30%) of respondents residing in the township noisy. According to (Hidayat, 2006) factors that affect the quantity of sleep as follows: age, gender, activity, and exhaustion, disease, environment, medicine, nutrition, and motivation. Environmental factors is a cozy and comfortable place for someone to start the process of sleep. According to (Saputra, 2013), presence or absence of specific stimuli from the environment may hamper efforts to sleep, for example, an uncomfortable temperature, poor ventilation, or certain sounds.

Based on the results of research on child quantity of sleep unfullfilled from 28 respondents showed on child underweight by 5 respondents (17.9%), children weighing as little as 15 respondents (57.1%), and children weighing more or obesity by 8 respondents (25%). According to Hidayat (2008), the requirement for adequate nutrition can accelerate the process of sleep. Researchers had assumed that parents must pay attention to nutrition consumed by children every day by helping the child to meet his needs.

Based on the results of the study in children with sleep quantity unfulfilled from

28 respondents showed family income <USD 500,000 as one respondent (3.6%), household income of Rp 500,000 to Rp 1,000,000 as many as three respondents (10.7%), income family Rp 1,000,000 and Rp 2,000,000 as many as 11 respondents (39.3%), family income Rp 2,000,000 and Rp 3,000,000 as many as five respondents (17.9%), and family income> as much as Rp 3,000,000 8 respondents (28.6%).. According to (Saputra, 2013), presence or absence of specific stimuli from the environment may hamper efforts to sleep, for example, an uncomfortable temperature, poor ventilation, or certain sounds. The fact is consistent with research showing that family income <USD 500,000 has facilities and amenities that are less comfortable bed in which there is only a thin bed that held the family slept on the floor and all gathered into one. Researchers assume that the facilities owned by the family greatly affect the child to meet his needs.

Based on the results of children with normal DDST results as much as 11 respondents (27.5%) and the results DDST suspect many as 29 respondents (72.5%).

According (Hurlock , 2012), the following aspects of child development, gross motor development are the child's ability to sit, run, and jump, including examples of gross motor development. Gross motor development of children is influenced by the maturation process, because process of maturity of each child is different from other children. Factors that influence the gross motor development of children such as: age, gender, the environment, maturity physiological organ, and stimulus.

Based on the results of the study in children with gross motor suspect as many as 29 respondents have showed children with less weight by 7 respondents (24.1%), children weighing quite as much as 15 respondents (51.7%), and children with weight excess of 7 respondents (24.1%). According Rusda Koti and Sri Maryati (1994, in Wahyudin and Agustin, 2011 in Ernawati 2013). Obesity often we find in early childhood and parents sometimes let or even pleased with the overweight child because the child looks cute and adorable. Researchers assume that the weight is very supportive of gross motor development in children, if children are obese, the child is likely to be delayed motor.

Based on the results of the study in children with gross motor suspect as many as

29 respondents get child outcomes male as much as 15 respondents (51.7%) and female as much as 14 respondents (48.3%). In Narendra (2002), said that in general, children have a pattern of normal growth and development, and this is the result of the interaction of many factors that affect the growth and development of children. One of them female mature faster than men. Researchers assume that girls are more rapid growth before puberty that affect development.

Based on the results of the study in children with gross motor development as much as 29 respondents suspect in getting the results of children with a family income of Rp 500,000 to Rp 1,000,000 as many as three respondents (10.3%), children with family income as much as Rp 1000000-2000000 12 respondents (41.4%), children with a family income of Rp 2000000-3000000 by 5 respondents (17.2%), and children with family incomes >USD 3,000,000 as many as nine respondents (31%). Poverty is always associated with the lack of food, poor environmental health and ignorance, will inhibit the growth of the child (Narendra, 2002). Researchers assumed that high-income parents are more likely, their children grow faster than gross motor with low-income parents, they are more likely to focus more on looking for their daily income that is less focused in the future development of the child.

Based on the results of the study in children with gross motor development suspect as many as 29 respondents showed a child with a parent who works as a private / self-employed as many as 29 respondents where 7% of the overall working as a trader in the market during the morning and evening. The fact that according to the research shows that parents only had time to interact with children only 2-4 hours in the afternoon. According Santrock (2007), many parents learn parenting traditions of their parents. Supervised child care takes time, it means to be committed from day to day, week to week, month to month, and year to year to give children a warm, supportive, safe, and stimulating that will make the child feel safe and allow them to reach potential fully. With their children raised by two parents who work, time spent with the child's parents they become limited and the quality of childcare to be a lot of concern many parents. Researchers assume that parents are busy working hardly

able to monitor and help provide stimulus to the development of gross motor.

DISCUSSION

Sleep quantity Against Development of gross Motor On Preschooler (3-6 years) In this research, Spearman rho test results statistically with a significance level of $p < 0.05$ (SPSS 16.0) on the quantity of sleep obtained significant coefficient of 0.003 with $p = 0.05$, which means that H1 accepted. It states there is a significant relationship between sleep quantity to the Development of gross motor of Preschool (3-6 years) on early childhood Mekarsari Surabaya. This means that if the quantity of sleep by the child's age requirements are met then expected gross motor development of children normally and in accordance with the stages of development.

Based on the results of the study showed that the quantity of sleep fulfilled with normal gross motor development as much as 7 respondents (58.3%) supported by the motivation of the family environment. According Andriana (2011), reciprocal interaction between the child and parents will lead to intimacy in the family. According to Hidayat (2014) state of the environment which is safe and convenient for someone can help accelerate the process of sleep. if children feel safe and comfortable, the gross motor development of children can develop quickly and normal. Daily activities and high fatigue may require more sleep to keep up the energy that has been issued. Nutrition is one requirement that must be fulfilled, if the nutritional needs enough sleep, it can speed up the process. Researchers assume the support and motivation given to a child in bed each day meet the needs of very influential in the development of gross motor, because parents are always responsive to the growth and development of children according to the age.

Based on the research that the quantity of sleep unfulfilled with normal motor development as much as 4 respondents (14.3%). According to Hidayat (2006), psychological stress can occur in children who experience anxiety resulting in sleeplessness. According Soetjningsih (2003) that the adequate family income will support the development of the child, because parents can provide all the needs of both primary and secondary children. Researchers assume that stress and family economic status can

influence need for sleep and gross motor development of children, because most parents focus on the activities to provide for the family without regard to the growth and development of children.

Based on the results of research conducted in early childhood Mekarsari Surabaya on May 9, 2015 many children who suffered gross motor development suspect, because they found the factors that hinder the development of children such as economic status, education level of parents, parental employment, and environment. The development is the increased ability (skill) in the structure and function of the body is more complex in a regular pattern and predictable as a process of maturation (Soetjningsih, 2003). The development is increasing imperfect functioning of organs that can be achieved through the maturity level of a fan of learning (Wong: 2009). Gross motor development of children is influenced by the maturation process, because the process of maturity of each child is different from other children.

Researchers assume that the quantity of sleep and gross motor development of children can be derived from the way parents care for and educate. For example, by parents are concerned about the child's sleep schedule needs according to age and provide stimulation to stimulate gross motor development. With so children can develop quickly and normal.

CONCLUSION AND RECOMMENDATION

From the results of research conducted by the author can be concluded that, quantity of sleep in children of preschool age in PAUD Mekarsari Surabaya is quite, development of gross motor skills in children aged preschool in early childhood Mekarsari Surabaya classified as suspect, and There is a relationship between sleep quantity on the development of gross motor on preschoolers.

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THE RELATIONSHIP BETWEEN ECONOMIC STATUS AND EXCLUSIVE BREASTFEEDING AT INFANT MORBIDITY

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ABSTRACT

Introduction : newborn babies are very susceptible to disease, so it requires good nutrition and good care. Providing good nutrition may be given through breast milk (ASI). Exclusive breastfeeding is the first food, the main and best for the baby, which is natural, whereas the good treatment is usually influenced by economic status. The purpose of this study was to determine the relationship between economic status and exclusive breastfeeding with infant morbidity age of 6 months. **Method :** The study design used is the analytical approach used is cross sectional. The population in this study were all infants aged 6 months to visit in February - March in BPS Kusumawati Surabaya. **Result :** Based on the research shows that family economic status of the majority of 55% is low and from 38 infants who were respondents 29% were breastfed exclusive. The result of cross tabulations and calculated statistically between economic status and exclusive breastfeeding with morbidity obtained p value <0.05 . **Discussion :** The conclusion from this research is there is a relationship between economic status and exclusive breastfeeding with infant morbidity age of 6 months.

Key words: economic status, exclusive breastfeeding, infant morbidity

INTRODUCTION

Newborns is a transition from a system of regular and largely dependent on his mother's organs, to a system that depends on the genetic Traffic and homeostatic mechanisms baby itself. So that the newborn is very susceptible to disease. Newborn morbidity is very high, this is caused by several factors, one of which is the intake or nutrition given to newborns and treatment. Babies should get the nutrition the best that can meet their needs and prevent illness and decrease infant morbidity by 19%. (Roesli, 2000) Intake of proper nutrition should be given ranging from newborn to 6 months is breast milk. Exclusive breastfeeding is the first food, the main and best for the baby, which is natural. (Sunar Dwi Prasetyo: 2009). Breast milk contains nutrients, hormones, immune factors of growth, anti-allergic and anti-inflammatory. Nutrients in breast milk include nearly 200 elements of food substances (Hubertin, 2004), so that the nutrient content owned by ASI, the baby began early birth in breastfed until the age of 6 months will have more endurance is good, because in addition to good fatherly growth and Breast milk contains antibodies juga

development that is needed by the body. The antibody is useful to keep the immune system so that the baby is not developing the disease. Tarini (2008) says infants who are not breastfed the first hour and not being exclusively breastfed for frequent diarrheal disease and ARI 1.4 times greater than babies who are breastfed the first hour and were exclusively breastfed. Himmatul research also shows that breastfed infants have a lower morbidity. (Fitriya, 2013)

But there are still a lot of babies who have not been exclusively breastfed despite its many benefits. Basic Health Research (Riskasdas) (2010) showed a tendency to low exclusive breastfeeding is only 15.3%, while the percentage of feeding prelacteal form of infant formula were the highest at 71.3% followed honey (19.8%) and white water 14, 6%).

In addition, infant morbidity are also influenced by economic status will affect parents in providing care to their babies. So the role of health care workers and the public need to be improved to enhance the implementation of exclusive breastfeeding and taught how to care baby properly in order to decrease morbidity and mortality in infants. Therefore, researchers

wanted to examine the relationship between exclusive breastfeeding on morbidity in infants 6 months of age.

METHOD

The design study is the analytical approach used is a cross sectional of a study in which the independent variables (economic and nutritional status of infants) and dependent (morbidity) were observed at the same time. The population in this study were all infants aged 6 months to visit in February - March in Surabaya for 43 BPS Kusmawati baby, then take a sample of 38 infants. Sampling carried probability sampling with simple random sampling technique in which all subjects have the opportunity to be a random sample.

Data were analyzed using chi square statistic test by using SPSS with significance level of 0.05.

RESULT

Characteristics of respondents

Table 1 Frequency distribution characteristics of respondents

Variabel	n	(%)
Economic Status		
Low economic status	21	55
High economic status	17	45
Exclusive Breastfeeding		
Yes	11	29
No	27	71
Morbiditas		
A history of past disease	16	42
Healthy	22	58

In table shows that of 38 infants, mostly 55% had low economic status, most of the 71% are not exclusively breastfed and most of the 58% fall into the category of healthy.

The relationship between economic and nutritional status with infant morbidity

Table 2. The relationship between economic and nutritional status with infants morbidity

Variabel	Morbiditas				p value
	A history of past disease		Healthy		
	n	%	n	%	
Economic					

Status	16	76	5	24	0.000
Low	0	0	17	100	
High					
Exclusive Breastfeeding					
Yes	0	0	11	100	0.001
No	16	59	11	41	

Based on table shows that of the 21 respondents with low economic status, most of the babies that as many as 16 infants (76%) had a history of illness. From the results of the above table and then analyzed with chi square test p value obtained (0,000) <0,05 so that H0 is rejected means there is a relationship between economic status with morbidity infants aged 6 months.

The table also shows that 27 infants who are not exclusively breastfed, most babies that as many as 16 infants (59%) had a history of illness. From the results of the above table and then analyzed with chi square test p value obtained (0,001) <0,05 so that H0 is rejected means there is a relationship between nutrition of infants with infant morbidity age of 6 months

DISCUSSION

The relationship between economic status with morbidity

Based on Table 4 shows that of the 21 respondents with low economic status, most of the babies that as many as 16 infants (76%) had a history of illness. From the results of the above table and then analyzed with chi square test p value obtained (0,000) <0,05 so that H0 is rejected means there is a relationship between economic status with morbidity infants aged 6 months.

Economic status is the income earned by the family. Parental income higher can increase the purchasing power of a good family food purchasing power and access to healthcare. (Agustin ID 2010). It is expected that each family could set up a fund for well baby care ranging from nutrition and health of infants. This study is in line with the study conducted by Septiana which shows that there is a relationship between economic status on perinatal morbidity (Aisyan, 2011).

The relationship between exclusive breastfeeding with morbidity

Based on Table 5 also shows that 27 infants who are not exclusively breastfed, most babies that as many as 16 infants (59%) had a history of illness. From the results of the above table and then analyzed with chi square test p value obtained (0,001) <0,05 so that H₀ is rejected means there is a relationship between nutrition of infants with infant morbidity age of 6 months.

Exclusive breastfeeding is the first food, the main and best for the baby, which is natural. (Sunar Dwi Prasetyo: 2009). Breast milk contains nutrients, hormones, immune factors of growth, anti-allergic and anti-inflammatory. Nutrients in breast milk include nearly 200 elements of food substances (Hubertin, 2004). The content contained in breast milk is needed by the baby starts early in life, therefore breastfed infants early in life up to 6 months and can be continued up to 2 years will have more endurance better compared with infants who are not breastfed. In addition, the substances contained in breast milk is better and more comprehensive than the substances contained in the formula of any kind.

Increasing the body's immune owned by the baby will be very helpful in the body may protect babies who are still very vulnerable to new things in the outside world, in other words breastfeeding will be able to decrease the morbidity in infants. (May, 2013). This study is in line with the study conducted by Nieza which shows that babies who are exclusively breastfed morbidity is lower compared to infants who are not exclusively breastfed are 35% of infants who are not exclusively breastfed 76% had a history of illness. (Nieza, 2010)

CONCLUSION AND RECOMMENDATION

There is a relationship between economic status with infant morbidity age of 6 months. There is a relationship between exclusive breastfeeding with infant morbidity age of 6 months.

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THE CORRELATION OF AGE AND SEX WITH DELINQUENCY BEHAVIOR IN PRESCHOOLER AT KINDERGARDEN SCHOOL IN SURABAYA

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ABSTRACT

Delinquency was the common problem in preschool. It assumed as a part of growth and development. As a child grow older, delinquency wil decrease and usually not be treated. Preschool boys and girl have differences type of bullying. The aim of this research was to identify the relationship between age and gender with degree of delinquency behavior in preschool. **Method:** This research used quesy experiment design. The sample were 36 preschool children in TK Sakti Merisi Surabaya. Simple random sampling was used to take sample in November 2015. Questionnaire was used to measure delinquency in preschool children. **Result:** The result showed 90% 5 years old preschool children have severe delinquency. Preschool girl have severe aggression 95,5% and preschool boy have equal between severe and moderate delinquency (50%). The result of chi square test showed there is relationship between age and degree of delinquency (p value = 0,000) and no relationship between gender and degree of delinquency (p value = 0,739). **Discussion:** This research showed delinquency behavior decrease as a children grow older and delinquency not influenced by gender. Growth and development have strong influence in delinquency in preschool children. Recommendation of this research was nurse need to develop intervention to treat delinquency in preschool children.

Keyword : age, gender and delinquency behavior.

INTRODUCTION

Delinquency behavior in children was the common problem. The delinquency that are common in schools is a disturbing action, fight and hurt others. Kids are often awarded as a brat and mischievous. Reprimand from the teacher to the child do if deemed delinquency have disrupted classes. Delinquency in children is often regarded as part of growing and decreases with developmental age of the child, so the child does not do mischief on the specific therapy (Rebye, 2005). According Meichenbau (2006) for handling aggressive behavior in boys and girls differently because of his aggressive behavior was different. Boys tend to like to break things and fighting. Delinquency in these children will determine their behavior in the period of the next age, so it needs to be studied further delinquency rate of preschool age children by age and gender.

Delinquency behavior in children can harm the child or others. For example, impale sharp pencil to his hand, or swing bag to their

friend, etc. It is also often found fighting child, humiliate their friends and said in harsh manner. Based on preliminary observations in children in kindergarten Merisi Sakti Surabaya of 35 students mostly are 25 children (71%) showed delinquency behavior like character in film. The results of research in the field of children have a habit in watching television violence with sometimes as many as 25 children (69.4%) and moderate delinquency rates were as many as 26 children (72.2%).

Activity and delinquency boys and girls have different. Girls are more like computer games, while boys preferred the friendship centered activities. In terms of socializing boys prefer physical activity, while girls prefer storytelling activities with friends. Therefore delinquency in boy different than the girls. Boys are more often bully and bullied than girls (Meichenbaum, 2006). Age of children affect in psychosocial development. Increasing age of the child, the delinquency will decrease (Rebye, 2005). The pattern of delinquency in children

will affect the pattern of delinquency in later age. Most children show a pattern of delinquency decreased, but the majority of children show that pathological patterns of delinquency. Understanding of delinquency in children, will help parents and teachers in school children to know how to cope. Proper handling when the brat will help children achieve the growth task. Instead, Improper handling can disrupt the development of the child and will have an impact on mental maturation of children at later ages. Developing an understanding of delinquency behavior in preschool children need to be increased through various studies and seminars on child development, so the delinquency pathologic at preschool age and can be further decreased.

Literature review

Delinquency is a violation of law or regulation committed by children under the age (10- 18 years) or behavior anti-social behavior that can threaten the safety of the child or the public (SPKIA, 2007). Delinquency in a child is a case which is prevalent. Nobody who does not pass through the stage / phase of this negative or no acts of delinquency. This problem not only affects some classes of children or adolescents in a certain area. In other words, this situation happens everywhere, coating and regional community.

Forms of delinquency are divided along three criteria, namely: "coincidence, sometimes, and habitual habit, which displays the level of adjustment to the point of fracture is high, medium and low. Other scientific classification using tripartite classification, namely: historical, instinctual, and mental. All that can be combined with each other. For example with regard to the root cause of crime instinctual, can be seen from the aspect of greed, aggression, sexuality, family breakage and anomalies in the boost group ". This classification is equipped with a mental condition, and the result represents a form of child or adolescent aggressive, greedy, short-thought, very emotional and unable to recognize the ethical values and a tendency to throw himself into the act detrimental and dangerous (SPKIA, 2007).

As for the kinds and forms of delinquency committed by children can be divided into several types:

1. Common Delinquency

Is a form of delinquency or teenagers who may be lying, went out of the house without saying goodbye to her parents, wandering, fighting with a friend, littering, truant from school and so forth.

2. Delinquency leading to criminal action.

Is a form of delinquency or juvenile who is a criminal act, in the form of crimes includes: stealing, pickpocketing, armed robbery, an abortion, rape, murder, gambling, viewing and distributing pornographic movies, and so forth.

3. Special Delinquency.

Delinquency is regulated in a special Criminal Law, such as narcotics, psychotropic substances, money laundering (Money Laundering), crime on the internet (Cyber Crime), crime against human rights and so on.

Other forms of delinquency (juvenile delinquency) is based on the personality traits that defect, which encourages them to be delinquent. These young children are generally short-thought, very emotional, aggressive, unable to recognize the ethical values, and tend to like to throw themselves into a dangerous act. Their conscience can hardly stirred, frozen.

4. Isolated Delinquency

This group is the largest number of teenagers delinquent; constituted the majority. In general, they do not suffer psychological damage.

Briefly, isolated delinquency it reacts to pressure from the social environment. They are looking for role models and securities from and within the group gang. But in adulthood, the majority of children had left the delinquent type of isolated criminal behavior.

5. Delinquency Neurotic

In general, children delinquent this type suffer from psychiatric disorders are serious enough, which include anxiety, was always insecure, feel threatened, cornered and cornered, guilty and innocent, and others.

Characterize their behavior, among others:

- a. Delinquency behavior rooted in psychological causes very deep, and not just a passive adaptation accept the norms and values that the criminal gang subculture that, also not in the form of an attempt to gain

social prestige and sympathy from the outside.

- b. Their criminal behavior is an expression of inner conflict unresolved, because the crimes they are releasing a tool for fear, anxiety and confusion batinnayayang clearly not terpikulkan by ego.
- c. Delinquent neurotic child has a weak ego, and there is a tendency to isolate themselves from the adults and teenagers more.
- d. The motivation of their crimes vary. For example, set on fire (pyromania, like burn) driven by lust ekshibisionistis, children who love to dismantle the demolition driven by the desire to release sexual appetite, and others.
- e. Quality show compulsive behavior (compulsion). The quality of this point are not on the type of delinquent isolated. Children and young people arsonists, the explosive dynamite and time bombs, North Sumatra University sex criminals and drug addicts included in this neurotic type groups.

Therefore a change in behavior of children delinquent this neurotic conflicts take place on the basis of serious or deep psychic once, then they will continue to conduct the crime until adulthood and old age.

- 6. Delinquent psychopathic
Delinquent this psychopathic few in number, but the views from the public interest and in terms of safety, they are the most dangerous criminal elements.

Characterize their behavior are:

- a. Almost all children delinquent originated and grew up in a family environment that is extreme, brutal, filled with plenty of family disputes, disciplined hard but not consistently, and always wasting his son. Not a few of them came from orphanages. In that environment they never feel the warmth, affection and intimate personal relation with others. As a result mreka not have the capacity to foster affection, was feeling life in general becomes dull or dead. As a result they are not able to relate emotionally intimate or well with others.

- b. Mereka not be able to realize the sense of guilt, sin or wrongdoing. Because it is often explode and uncontrolled.
- c. Plural form of crime, depending on her mood chaotic can not be unexpected. They are generally very aggressive and impulsive. Usually they convict who repeatedly and out of jail, and difficult to repair.
- d. They always fail to realize and internalize social norms that apply generally. Also do not care about his own gang subculture norms.
- e. Often they also suffer from neurological disorders, thereby reducing the ability to control himself.

Factors - factors that affect the delinquency

There are several factors that lead to delinquency among (SPKIA, 2007) :

- 1. Individual
 - a. Personality and behavior
 - 1) emotional attitude as suspicious, feel underappreciated, want power, not to be working, stubborn, egocentric.
 - 2) The relation of social, sexual and family is not good, was not satisfied.
 - 3) The result of a bad school, lazy, ignorant, often naughty, do not have plans for the future.
 - 4) Time leisured filled with tense experience, drinking, stealing, and there are allegations that there are children who are gifted to be naughty
 - b. Physical and mental state
There is no real difference between a bad boy with a naughty child who is not on the state of physical, mental and intelligence
- 2. Family Background
Family circumstances are generally inferior compared to families naughty children who are not of the same socio-economic level. Parents are less inculcate norms polite to her children, family situation is not stable and is often a broken home and no warm bond between children and parents. Mother did not konsekueni in the discipline, rigid exceeded father.
- 3. Social Factors
 - a. The economic situation
 - b. Integration of society if society were included, then there is a feeling of being the

majority rather than the community that delinquency is reduced.

METHOD

This research was cross sectional study, is the kind of research that emphasizes the time of measurement or observation of data independent and dependent variables only one at a time. In this type, the independent and dependent variables assessed, simultaneously at any one time, so there was no follow-up.

Data collected at November 2015 in Sakti Merisi Kindergarden School. The sample was 36 preschool children taken by simple random sampling.

Instrumen in this research was use questionnaire. There ware 20 question about delinquency behavior. This questionnaire given to teacher in Sakti Merisi Kindergarden School, to observe delinquene behavior in their student.

RESULT

The result shows the characteristics of respondents which are include age of children, sex of children,educational background of parent and characteristic job of parents.

A. Characteristic of patient

Table 1. characteristic sample based on age of preschool children

Age	Frequency	Percentage (%)
4 years	12	33,3
5 years	22	61,1
6 years	2	5,6
Total	36	100.0

Table 2. Characteristic sample based on sex of preschool children

Sex	Frequency	Percentage (%)
Boy	16	44.4
Girl	20	55.6
Total	36	100.0

B. The correlation of age with delinquency behavior of preschooler children

NO.	Age	Delinquency behavior	Total
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		Moderate	Severe	
1	4 years	4 33,3%	8 66.7%	12 100%
2	5 years	21 95,5%	1 4,5%	22 100%
3	6 years	1 50%	1 50%	2 100%
Total		26	10	36
p value		0,000		

C. The correlation of sex with delinquency behavior of preschooler children

NO.	Sex	Delinquency behavior		Total
		Moderate	Severe	
1	Boy	8 50%	8 50%	16 100%
2	Girl	18 90%	2 10%	20 100%
Total		26	10	36
p value		0,739		

DISCUSSION

a. The correlation of age with delinquency behavior of preschooler children

The result showed that the age of the child have correlation with the level of delinquency in children. Statistical test results showed the value of $p = 0.000$, which means that there is a relationship between age and sex of the child. The increasing age of the child, the lower the level of mischief.

The more the child's age increases, the ability of children to refrain from doing self-regulation, the better. This is evident from the research data, which with age showing tinggat delinquency decreased.

Children who are able to exercise restraint and do self-management will be able to manage the problem without anger both physical and non-physical. These children tend to look more mature when facing conflicts in its class (Balden, Gaffrey & Luby, 2012).

Child who bully in childhood can lead to aggressive behavior at age increases. Children who are bullied often do not express their feelings. They will not tell the treatment he received from his friend and could behave nasty

later on if bullying is not addressed. In the long term they can hurt themselves. Child bullying in childhood will likely continue agresivnya behavior in adulthood and current control others (Beran, 2012).

b. The correlation of sex with delinquency behavior of preschooler children

The result shows the relationship between the sexes with delinquency in children. Based on the statistic with chi square test p value 0.739 obtained. This means there is no relationship between age and sex of the child. the results showed no relationship between gender and level of delinquency in children because research instrument does not differentiate between types of kelakalan boys and girls.

Bullying in the boys different from girls. Girls spent more time to socialize, play computer and perform activities centered on the activities of friendship. While a tad more physical berarifitas. These different activities ultimately lead to different patterns of delinquency both in boys and girls (Beran, 2012).

Bullying in girls more indirect. Girls tend to his bullying indirectly through its peer group. They convey information about the child's painful disliked by his friends without directly opposite. In older children, girls tend to hurt her friend through social media so that others come to hate her. (Beran, 2012).

Boys tend to do mischief with physical violence. Boys tend to be hit, slapped, kicked, pushed and punched her during an argument. Boys are more likely to do mischief verbally and physically than girls (Beran, 2012).

Delinquency and bullying have an enormous impact on children who are targeted. Children who at the bully will feel depressed, angry, eat and sleep less than other children. In addition, children who become targets tend to have difficulty concentrating on schoolwork, problems in dealing with others, lying, trouble-making, to steal, to avoid the worst impacts of the school and is suicidal (Beran, 2012).

Based croostabulasi according to the education of parents of students from 36 students in kindergarten Way Merisi Surabaya, parents with a high school education dominant have children with the delinquency rate is high,

poor parents instill norms politely for their children, can trigger level of delinquency , So it is a parent education and sex of the child is a contributing factor in the rate of delinquency.

Parents have an important role in influencing their children toward positive behavior. For example, parents could watch less television as an enriching experience the whole family. Therefore parents are in control of the environment mikrosistem family, the father and mother can maximize the positive impact for children, as a model for their children, so they got a good role model identification (Rini, 2011).

CONCLUSSION AND RECOMMENDATION

1. Delinquency of children in kindergarten magic sill Merisi by age shows that most of the moderate delinquency, namely in children aged 5 years and at most high delinquency at age 4 years.
2. Delinquency children in kindergarten Way sill Merisi based on gender male balanced between medium and high delinquency, while the girls mostly show moderate delinquency rates.
3. There is a relationship between age and the level of delinquency in kindergarten Merisi Sakti Surabaya.
4. There is no relationship between gender and the level of delinquency in kindergarten Merisi Sakti Surabaya.

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DESCRIPTION OF SLEEP PATTERN DISORDER ON CHILD WITH CANCER RELATED FATIGUE (CRF) IN CIPTO MANGUNKUSUMO HOSPITAL JAKARTA

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ABSTRACT

Introduction: Fatigue is the most common symptom in patients with cancer and its treatment. CRF in general is often caused by the effects of chemotherapy, radiation, immunotherapy. One of the symptoms of CRF is a sleep disorder. Sleep disorders in children may occur due to health problems such as pain, stress, depression, use of drugs. The purpose of this study is to describe the problem of disruption of sleep patterns in children with Cancer-Related Fatigue (CRF) in the Pediatric Non Infection Ward of RSUPN Dr. Cipto Mangunkusumo. **Method:** This research is used descriptive method with quantitative approach. The sampling technique is total sampling (samples saturated) with a sample of 32 children. **Result:** Results of measurements of sleep patterns in children with cancer who were treated at Children's Non-Infectious Space RSUPN Dr. Cipto Mangunkusumo is showed interference. **Conclusion:** This is evidenced by the measurement through a sleep diary that assesses sleep patterns of the number of hours of sleep at night, the time it takes to fall asleep, sleep during the day, as well as the child's condition when I wake up in both the morning and afternoon.

Key words: Sleep pattern, Cancer-Related Fatigue (CRF), Child

THE EXPERIENCE OF PARENTS REJECT COMPLETE BASIC IMMUNIZATION OF CHILDREN

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ABSTRACT

Introduction: This study explored the experience of parents who refuse immunization of basic complete for their child. Indonesia had high level of drop out rate immunization that made increasing of disease (PD3I). This condition effected suffering and death for children so that disturbed their growth and development. One of the reason why the uncomplete immunization was parent refusing. The study characterized by attention to the full range of human experience and the integration of knowledge gained from understanding of parents' subjective experiences. **Method:** A descriptive phenomenologic method approach was used to collect, code and analyse the data. Semi-structured questions were asked to participants by indepth interview to allow they described their lived experiences. The data-gathering from participants that choiced by purposive sampling, used interview recorded and field note. **Result:** This study had a theme and four sub theme. The experience of parents who refuses immunization of basic complete for their child can help health care provider (especially nurse) decided strategy for goal of universal child immunization 2014.

Keywords: parents, immunization, culture of Madura

INTRODUCTION

The fourth government's commitment to the MDGs 2015 was namely policies and strategies for reduction in child mortality through a variety of strategies (National Development Planning Agency, 2010). One such strategy is to increase timely immunization coverage in infants and children under five year. The Indonesian government has required children receive basic immunization. It has become a free program of government for the people (five complete basic immunization program). However, the achievement of the immunization coverage is not optimal due to various constraints.

Infants basic immunization coverage in Indonesia ranks fourth lowest after Timor Leste, India, and Nepal in ASEAN and SEARO in 2009. The percentage of children aged 12-13 months who have received complete basic immunization in 2010 in Indonesia, 53.8%, 33.5% incomplete and not immunized 12.7% (Ministry of Health, 2011). Furthermore, in East Java that has receives complete basic immunization is 66%, incomplete immunization 25.8% and not immunize 8.2%. Distribution percentage of children under five have received basic complete immunization in Madura East Java, according to Riskesdas (2007) is still low at 20.39% Bangkalan, Sampang 9.33%, 9.01% Pamekasan, and Sumenep 6.06%.

The low number of the achievement complete immunization could affect the increasing incidence Preventable Diseases Immunization (PD3I). Based on the number of cases PD3I in ASEAN and SEARO in 2010, Indonesia became the second country after India in a case of diphtheria, measles and neonatal tetanus in the amount of 385, 16 529, and 137, and ranks third after India and Bangladesh for cases of tetanus by 137, but there is no case of polio and pertussis (WHO, 2011 in Ministry of Health, 2011). PD3I incidence in children may increase morbidity and mortality, especially in children under five year. Therefore, prevention efforts need to be done PD3I with the immunization program.

Visiting for immunization of children on immunization program in Indonesia is low according to the study Kepmenkes RI (2011) caused by several things. One was due to the refusal of parents to immunization. The statement in accordance with the principles of family-centered care where a family is a constant part of the child's life (Hockenberry and Wilson, 2009). So that family involvement should be considered in resolving the issue.

Nurses as part of health workers are expected to contribute to solve the problem of immunization. to provide nursing care by paying attention and respecting the experience and faith

of clients (Hockenberry and Wilson, 2009). So it is very important to know the experiences of parents refusing immunizations as a material consideration in determining the strategy to achieve the immunization. But there is no specific research on the experience of parents refuse complete basic immunization in children, especially in the island of Madura. So that researchers interested in conducting this research.

METHODS

This study is a qualitative research conducted using the phenomenological design. Research carried out in the territory of the island of Madura, it is in Parteker, Pamekasan. Participants who have been involved in this study a number of 8 mothers with children basic immunization incomplete derived from the Madurese original (father and mother lived and came from Madura tribe) and has been living at least 20 years on the island of Madura until now, and never moved to other areas outside the island of Madura. The instrument used in this study was researchers as interviewer participants. The methods used to collect the data are in-depth interviews (indepth interview). Type the researchers used interviews are semi-structured interviews.

Data is collected in a place that has been approved by the participants and researchers, for example in the house participants, langgar (place for reciting qur'an), trebun (building of wood resting place) or the village hall and would have avoided the place as somewhere to stay local health authorities. The method of analysis in this study is Collaizi.

RESULT AND DISCUSSION

1. Distribution Characteristics of Participants

Most participants were less educated (SD) with housewives work that could potentially have an understanding/ knowledge are less to immunization.

Table 1. Distribution of participants, from June to July 2015

Characteristics Respondents	Total (n=8)
Mother education, n (%)	
a. Elementary	4 (50)
b. Junior High School	2 (25)
c. Senior High School	2 (25)
Mother works, n (%)	
a. House wife	6 (75)
b. Enteprenuer (Seller)	2 (25)

Number of children, n (%)	
a. ≤ 2	1 (12,5)
b. > 2	7 (87,5)
Age mothers, <i>mean</i> (SD), year	28,9 (4,48)

Table 1 shows that the average age of mothers was 28.9 years, half of the mother had elementary education, most housewives have jobs, and the number of children of more than 50%.

Research conducted by Wibowo (2008) and Veriani (2013) states that a respondent with less knowledge about the understanding, effectiveness, schedule, side effects, and contraindications immunization will tend to have low motivation to immunize her child. This is consistent with the concept that states the level of knowledge of a person affected by education, experience, information, cultural environment, and socioeconomic (Notoatmojo, 2007).

1. Husband For Decision Makers

Six of the eight participants have difficulty deciding to immunize a child because the baby's father's decision not to immunize. Here are some statement from the respondents stated that the statement does not immunize because of the decision of the husband:

P2 "...meskeh engkok taoh jek imunisasi bagus, tapeh e soro bapak en tak olle e imunisasi..."

Culture in the area of research in general are still adhered to a patriarchal culture, where decision-making is still dominated by the husband such as the decision to follow the family planning program, infant immunization, antenatal care, deliveries and other health problems. The things mentioned above leads us to realize that cultural factors may influence patterns allow or parental care of the baby, especially for immunizations.

These research is consistent with research conducted by Wahyuningsih and Sutaryono (2008) explains that barriers to immunize the baby's mother is due to the husband's decision. Mother obeys the husband's decision because the cost of living resources of the husband, religiously wife must obey the husband and wife requires culture submissive to her husband or parents.

2. Low Motivation Mom to Bring Children Immunization

Five of the eight participants experienced show low motivation to not immunize

completely their children. Here are some excerpts sentence each respondent:

P4 "...*ajieh jih kabbi kacong tak e suntik polannah males se nyambieh ka posyandu...*"

Motivation is a great encouragement mother used to get immunizations for their young children. Supportive attitude towards immunization can be a factor that causes a mother carrying her baby immunized. Attitudes that support can be formed from their mother's belief about the importance of immunization for babies, direct or indirect experience that mothers get about immunizations, and knowledge of mothers about immunizations. The results are consistent with research Rahmadhani (2013) with Chi-Square test showed the value of $p = 0.251 > 0.05$ and $OR = 1.737$. which means that mothers who have high motivation to immunize their babies have a risk of 0.7 times compared to women with low motivation.

3. Mother Less Knowledge of Immunization

Five of the eight participants had showed less knowledge about the immunizations that are incomplete immunize their children. Here are some excerpts sentence each respondent:

P7 "...*tak la paggun sehat tekkah tak esambih suntik ka bu bidan, paleng bu bidannah nyareh pesse se terro entarrah...*"

The statement showed that participants do not understand the benefits of immunization and adverse events / follow-up post immunization. That low knowledge establish refused attitudes towards immunization because it creates negative perception, particularly on the effects of follow-up post immunization. In the other hand with their good knowledge about the complete basic immunization, mother will have a positive attitude to immunize their child regularly. Thus indicating that the information obtained by the respondent through health workers provided with the right attitude can affect the mother in immunized her child. The more information is obtained about the complete basic immunization the more positive attitude of the mother to immunized her child.

Wibowo (2008) found that there was a significant relationship between the level of knowledge of mothers with maternal motivation to immunize their cholf in village districts Dukuhturi Brits Brebes. Karina and Warsito (2012) also found that there are mothers who have less knowledge are 37.5%. The maternal knowledge that still lacking is expected to be increased with efforts to provide basic counseling about immunization so that

knowledge can support the children immunization status.

4. Low mother Participation In children under five years Health Program

All Mother said that never participated in infant health program (Posyandu). Participants following statement is:

P2 "...*dek adek en bennyak se abentoh bu bidan, pas sateya sakonik, deddih bu bidan kadibik en se mabedeh posyandu neng praktek ennah...*"

Based on the statement can be illustrated the low participation of participants/mother in infant health program organized by the local midwife with posyandu. Posyandu is one form of health services being of, by, and for the people who performed with the support by health workers, either a midwife or doctor. Posyandu is a health care organization that is closest to the people, therefore it expected to provide facilities for local community health services.

Posyandu is also part of the health development that programmed by the government which had goal the development of health for realize small, happy, and prosperous family under the guidance of local health authorities. When posyandu service activities well run and maximum, it can improve the health of children, especially children under five years (Ministry of Health of the Republic of Indonesia, 2011). Therefore, as one form of health care organization that aims to reduce under-five child mortality, need community participation, especially mothers and children under five. Mother participation form can be a cadre or actively present on each implementation of immunization in posyandu.

CONCLUSION AND RECOMMENDATION

Conclusion

This qualitative study involved eight participants of Madurist mother who refused to give their children are complete immunized. The main theme of this research is the reason the mother is uncomplete immunized children. The theme have six sub-topics. There are husband as decision makers, the low motivation of the mother to bring child to immunization, maternal lack of knowledge about immunization, low participation of mothers in infant health program.

Recommendation

Nurse or health workers are expected to provide immunization health education to

parents, with the involvement of her husband (the father of the child) and if necessary grandmother and grandfather at once.

The topic of immunization health education should include benefit of immunization and how to cope with the side effects of immunization; because family are poorly understood about that.

Health workers in collaboration with local health services can provide a variety of health education media in addition to counseling, for example leaflets, booklets, or a billboard.

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EFFECTIVENESS OF PROBIOTIC SUPPLEMENT TO GLUCOSE BLOOD LEVEL TOWARD GESTASTIONAL DIABETES MELITUS

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ABSTRACT

Introduction :Gestastional the prevalence of diabetes mellitus in Indonesia reached 1.9%-3.6% in the entire of pregnancy and has increased every year. Gestastional of diabetes mellitus risks of preeclampsia, abortion, polyhidramnion, infections, uterine contractions disorder, partus long, operation caesar risk, post delivery bleeding and occurs diabetes mellitus sequel. In infants occur makrosomia, hypoglycemia in the first 24 hours of birth, congenital defects, hypokalsium, hyperbilirubin, coroner and kidney disorders, neuro and skelet disorders, this condition increasing the death rate of mothers and babies. This study aim to invesgate to know the different blood glucose level before and after given probiotic supplementation for 7 days every day on gestastional diabetes.

Method : This study was quasy experiment with pre – post test control. The population includes all of gestastional diabetes mellitus of 81 subject. Sampling used a purposive sampling and sample was 36 subjek and use pair t test analisis. The characteristic of subject this studi are gestastional diabetes mellitus on trimester II dan III with primigaravida or multigravida, without complication of diabetes melitus, normal pregnancy and has got programming of diabetes pregnancy. Result of paired t test is $p < 0.05$.

Result : Results is there are influence supplement probiotic giving to blood glucose level with t test prandial blood glucose level $p = 0.001$, 2 hours post prandial blood glucose level $p = 0.001$.

Discussion : Probiotic supplement proven to be an influence blood glucose level to gestastional diabetes

Key words: Probiotic, Blood Glucose Level, Gestastional Diabetus

INTRODUCTION

Gestastional diabetes melitus in Indonesia have a prevalence of 1.9%-3.6% with overall of pregnancy. In Surabaya has increasing every year. In 2013 there is pregnancy with diabetics 71 and in 2014 increasing to 86 (Health Office, 2014)

Complication occurs of pregnancy, childbirth, post partum soincreasing mother child death rate. Risks of mother arepreeclampsia, abortion, polyhidramnion, infection, contraction uterine disorder, long first delivery periode, risky of caesarean, infection and bleeding post partum and diabetes mellitus sequel. Infants by 5/10,000 of births are makrosomia, hypoglycemia, congenital defects , defect of birth, abnormalities of heart, kidneys, neuro and skelet, hypokalsium, hyperbilirubin, asphyxia syndrome and breath failure. Cause of is insulin produced insufficient by the body not enough so metabolism of glucose through cell membrane had disturbed with trigged by

hormonal placenta lactogen, diet, heredity, stress, smoking, obesity, excessive carbohidarat consumption, chemicals or medicines and pancreatic cell damage by viral , bacterial infections (Syaifudin cited by Sukarya, 2008). Symptom and signsare polyuria, polydipsia, dizziness, obesity, nausea and vomiting, obesity, high-fundus uteri is greater than gestational age, weak body, tingling, itching, haze, pruritus vulva, ketonemia, glikosuria, blood glucose 2 hours post prandial > 200 mg/dl , blood glucose prandial > 126 mg/dl (Syaifudin cited by Sukarya, 2008).

Hariadi Cited by Juwono (2005) menagement includes screening, managing patern, administering insulin and specific antenatal care. Screening can be done with indication of obesity, having diabetes mellitus history on, have a history of urine glucose intolerance, and having family history of type 2 diabetes mellitus . If risks of factors are found do TTGO test and had reviewed test in

24-28 weeks and maintain prandial blood glucosalevel < 105 mg/dl and blood glucose post prandial< 120 mg/dl (Juwono, 2005; Sukarya, 2008).

Management had not done maximum yet, especially of patterns food so has increasing every year and still to find abnormal blood glucose control. Unsuccessfully is caused by less knowledge level and disobey with concerning recommended pattern

Probiotic is living microbes actively improving health of consumers by balancing digestive tract microflora if taken on living conditions with sufficient able to regulate immune responses fragment potentially antigenic food, removes bacterial pathogen adhesion, replace with bacteria non pathogen ,modify genetic strain of bacteria to produce antibodies, enzymes and cytokines (Zhang, Y *et al*, 2013; Osta'dhrahimiet *al*, 2000, Firouzi *et al*, 2015). Probiotic safe for pregnancy and lactation, improve lipid profile, glucose tolerance, insulin secretion, decreas plasma cytokines proinflamation(Loegircio *et al*, 2005; Shavaki *et al*, 2013).

A preliminary study at November 2015 showing that 10gestastinaldiabetes haddecreased blood glucose 1-2 mg/dl after had given probiotic supplement drink for 7 days. Research of probiotic with human subject is Loegircio *et al* (2005) probiotic can to manipulate intestinal flora, increase cytokine pro inflammatory and hepatoprotector so beneficial for chronic liver disease. In line with research above is Aller *et al* (2011), probiotics improve levels of ALT, AST, GT-³ and research of Dong, *et al* (2013) probiotic lactobacillus casei shirota significant increases activity of NK cells and antibodies

RESEARCH METHOD

Design of research has experiments with pre and post control. The population of 81 subject with gestastional diabetes mellitus and sample consist of all gestastional diabetes in Surabaya. The sampling using purposive sampling with a total sample of 36 sample control and treatment groups 36 sample.This study has two variables. The variable are supplement probiotic as dependent variable and blood glucose level as independent variabels. This study to be done since oktober 2015 until desember 2015 at local government clinic. Blood glucose level had taken by digital equipment trough artery blood fingertip. The

first process of ethical clearence is managing recommendation from center of health government, at second meet subject and explain about a purpose of study as well as safety probiotic supplement for pregnancy and infant and third to give agreement receipt and advise to signature informed concent as agreement of evidancedStatistical tests using paired t test (Dahlan, 2014)

RESULT

Table 1.1 Frequency distribution

Group mg/dl	N	Min	Maks
BGL pre	36	127	142
BGL post		110	120
BGL 2 PP pre		160	170
BGL 2 PP post		119	120
Paritas			
Trimester II	18		
Trimester III	18		

Source : 2015

Table 1.1 describe that prandial blood glucose level before given probiotic supplement of minimum level is 127 mg/dl and maksimum level of 142 mg/dl and after given probiotic supplement of minimum level is 110 while maksimum level of 120 mg/dl. While 2 hour post prandial blood glucose level before suplent of minimum level is 160 mg/dl and maksimum level of 170 mg/dl, but after supplement of minimum level is 119 mg/dl and maksimum level is 120 mg/dl. The paritas are trimester II of 50 % and trimester III of 50%

Table 2.1 Normality result test with Kolmogorov Smirnov

Group	p > 0.05
Pair BGL prandial pre – post suplement	0.383
Pair BGL 2 hour post prandial pre –post suplement	0.083

Source : 2015

Tabel 2.1 has explaining normality test with kolmogorov smirnov test and significant of blood glucose prandial p = 0.383 (p> 0.05) it means the distribution is normal as wel as with 2 hour post prandial test on signifkansi p= 0.083 (p> 0.05) that means distribution is normal.

Table 3.1 Paired statistic test

	Pair group mg/dl	Mean	N	Std. Dev	Std. Error Mean
Pair 1	BGL pre	137	36	3.461	.577
	BGL post	112	36	3.692	.615
Pair 2	BGL2jampre	166	36	2.620	.437
	BGL2jampost	120	36	.351	.058

Source : 2015

Table 3.1 describe that mean before supplement of 137 mg/dl for prandial blood glucose level and after supplement of 112 mg/dl. This condition indicates that there is a decrease in the levels of prandial blood glucose by 25 points,

While 2 hour post prandial blood glucose level before supplement of 166 mg/dl and after supplement of 120 mg/dl. This condition indicates that there is a decrease in the levels of 2 hour prandial blood glucose by 46 points

Table 4.1 Paired t test correlation

	Group mg/dl	N	Correlation	p
Pair 1	BGLpre&GDLpost	36	.467	.004
Pair 2	BGL2jam pp pre & BGL2jampp post	36	-.056	.745

Source : 2015

Table 4.1 explain that r squared of prandial blood glucose level of 0.467^2 (0.21) and significant with $p = 0.004$. That means probiotic supplement 1 table spoon every day which mixed 250 cc drinking water can to impact prandial blood glucose level in constant of 21% while 79% had affected by other factors. But in 2 hour post prandial blood glucose level of -0.056^2 (0.003) with sigifikansi $p = 0.745$ that means probiotic supplement has no effect in significant 2 hour blood glucose post prandial level of 0.03% while 99 % had affected other factors. This condition indicates that there is a change in the levels of glucose 2 hour post prandial but not consistent. Most had turned lower and most had not changed

Table 5.1 Paired sample t test

Group	Paired Differences	t	df	p
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mg/dl	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	95% Confidence Interval of the Difference Upper
Pair 1 BGL pre - BGL post	24.75	3.69	.61	23.49	26.01
Pair 2 BGL 2jam pre - BGL 2jam post	45.77	2.66	.44	44.87	46.67

Table 5.1 explain paired t test results obtained $p = 0.001$ that means 1 tablespoon probiotic supplement mixed with 250 cc of drinking water for 7 days every day impact on blood glucose levels in pregnancy with diabetes mellitus (Sakai *et al*, 2011; Glesson *et al*, 2015). The means of prandial blood glucose level before and after supplement of 25 mg/ dl ($M= 24.75$; $SD = 3.69$) and 46 mg/dl for blood glucose level 2 hour post prandial ($M=45.77$; $SD = 2.66$)

DISCUSSION

Paired t test results is $p < 0.05$ that means that prandial blood glucose levels experience a change of 3 mg/dl and 2 hour of post prandial blood glucose of 3 mg/dl after a given probiotic supplements. This condition cause of ability of probiotic to manipulate mikrota intestinal flora. The equilibrium of intestinal flora can to secrete cytokines and to increase hepatoprotectorso being to reduce fat perioksidasi and able to improve the layer cells damaged by free radicals. In addition, to probiotics are able to fix β cells of pancreas damaged so stabilizing of insulin metabolism and improve blood glucose (Loegircio, 2005; Takeda, 2007; Dong, 2013)

CONCLUSION AND RECOMMENDATION

There is on influence of probiotic supplements concerning blood glucose levels toward gestational diabetes mellitus is $p < 0.05$ ($p=0.001$) so given probiotic supplement had recommended for gestational diabetes mellitus as blood glucose balanced and supplement probiotic given need to be accompanied by the expert

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PARENT'S PLAN ACTION DURING ACUTE LYMPHOBLASTIC LEUKEMIA: FROM HOME TO COMPLEMENTARY MEDICINE

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ABSTRACT

At least, children with acute lymphoblastic leukemia (ALL) force the children to follow long period protocols. This situation was complex due to children and parents. When they permit the treatment, it make more easy to survive but depend on parents support. This research is to explore parents caring role on children with ALL. This qualitative study held in Yogyakarta at June 2014, data collected by indepth interview with 8 parent's from children with ALL. Data was recorded, transcribing and analized using collaizi method. During the illness, parent caring the children at home with independent care, bringing to the hospital and giving complementary medicine. At early treatment they decide to go to traditional medicine, but at present it didn't show more benefit than follow the ALL protocol's. Complexity situation of treatment cause parents role strain. They face this stressor by delegating caring role of health children and economic function to the other family members.. Parent changing role during caring the children was one way to maintain family structure.

Key words: parents, action, role, leukemia

INTRODUCTION

Leukemia is the most common cancer in children. International Agency for Study on Cancer (IARC) revealed that children around the world who suffer from cancer is about 250. 000 (Cutland, 2011). Cancer as a chronic disease that can cause many problems. The highly costs burden of chronic disease treatment resulting in greater losses due to lost productivity and a decrease in quality of life (Friedman, Bowden, & Jones, 2003). In long time, parents will be faced by a series of treatment protocols for children. One of the treatment protocol for Acute Lymphoblastic Leukemia (ALL) includes three stages of treatment, induction- remission phase, consolidation and maintenance should be done in at least 2.5 years (Imbach, Kuhne, & Arceci, 2004).

This condition, caring and long period of treatment may cause family unsustainability, providing threat on physic, emotional and effected family functioning (Hitchcock, Schubert, & Thomas, 1999). In family centered care perspectives, family is the main subject on

caring. Family wouldn't separated from child because they are people who most closest with them, prior caregiver to the child to maintain health status (Friedman, Bowden, & Jones, 2012). As usual, parents role devided into formal and informal role (Friedman et al., 2003).

Changing role when caring children with cancer was surprisingly, although there were sharing responsibility, many problems may appear (Svavarsdottir, 2005). At the present, parents role were changing depend on many situation. In Indonesia, children health status depend on their parent as prior caregiver, including children with ALL. Futhermore, this research explore parents caring role in children with Acute Lymphoblastic Leukemia.

METHOD

This research use qualitative method. Data collected from 8 parents of children with ALL in Yogyakarta during June 2014 use indepth interview. Data was recorded and transcribed then analize use collaizi method.

RESULT

Parent Plan Action During The Illness

Table 1. Parent’s Plan Action During ALL Illness

1	At Home : Independent Care	Rest Schedule for Children	Parents not only do medical administering for caring the children, during the duration of ALL, they complete this with complementary medicine, to persist health status and prevent from bad condition to the body.
		Managing nutrition	“the fact is after he consuming jamu, his condition never drop until now”(R8)
		Activity Management	Delegating Role To Other Family Members
		Providing basic health care instrument for check up	In early treatment, at least a half of first year parents have to take care the children in hospital. In other situation, they left another health children at home with other family members (e.c. grandfather/mother, sister or brother in law) as the caregiver for them.
		Giving health education to others about positive health behavior, including the sibling	
		Facilitating health education	“I’m working for a while, all do by my nephew”(R5)
2	Bringing to Health Care Provider	Traditional medicine (massage, kyai)	When father accompany the children in hospital, their responsibility to work decrease and appear, they event lost their jobs. To maintain in this situation, other family members actively help them to fulfill the need.
		Bringing to the hospital from pima	
		Following LLA protocol’s	
		Accompanying Children during hospital care	
3	Giving Complementary Medicine	Mangosten, propolis, jamu, cekok, kuyit putih, temulawak, temuireng, honey, jambu biji	DISCUSSION Family functioning as health care provider, family member providing primary care, decision making, primary care giver and individual support, increase wellness, illness prevention, health care, maintenance chronic condition and rehabilitation (Friedman et al., 2003). When the children diagnosed on ALL, parents do several plan action not only at hospital but also at home. The describe the independent care by managing rest schedule for children, managing nutrition involving what kind of nutrition is bad or good for the children. They force to minimize or delete food with addictive, giving a big portion on fruits and vegetables. Parents play role to managing activity of the children, when and what kind of play. After ALL cemothoraphy, children faced several condition, like nausea, vomiting (Sitaresmi et al., 2009), or sometimes in hyperthermia. To prevent the children from that condition or outside infection, basic health care instruments are needed, such as mask, thermometer, hand wash, emergency drugs and multivitamin. Since children take care at home outside hospital care, they have to interact with the

As shown in table 1. parent organizing their activity since their children were diagnosed with ALL. At first time they bring the children into traditional medicine , by masage, or bringing to kyai who believed as spiritual coacher.

“I bring to kyai, it’s our way to find the healing”(R2)

But at present time they don’t feel better and decide to bring the children to the doctor.

“Bring him to the hospital, medical instrument were good and the disease were unknown (before) “(R6)

During t he LLA protocol’s, children must be on intensive monitoring from side effect, bad condition that may be worse or complication. To maintain physical condition on children, parent’s do several thing as an independent care at home,such as rest schedule that must be done by children. Sometimes they force the children to discipline them.

“We force her.at time to bed, she must do it to take a rest” (R1)

others, like sibling or another family members. In this perspectives, parents initiate to other family members to giving support by maintain positive health behavior. Giving health education to other family members is one way effective. By doing this, other family members were cooperate with parent. But the other side, siblings whose age at average more difficult to educate especially on playing and activity with the children. Parent prefer to care the ill children and result sibling reaction (Anggraeni, 2012). Last action doing by parent at home is monitoring and providing drugs therapy. Directly monitoring of drugs more dominate by mothers than fathers.

Besides independent care at home, parent treat the children to health care provider. At early illness before the doctor, they bring them to alternative medicine/traditional medicine, kyai as spiritual coacher and massage because they had saw the symptom like rubour skin, or because parent wasn't ready to go to hospital. Later they did'nt find the benefits, then decide to bring them to the hospital. At primary hospital, all of the children got advice to advance hospital because lack of material and medical health care competencies barrier.

At th e hospital, parent follow ALL protocols start from BMP,cemotherapy and others. Not at all accompanied by parents, especially for bone marrow punction (BMP). Children show protest respon during bone marrow punction, it causes stressors face by parents. Parent participation during teraphy give benefits for increase parents satisfied, bonding attachment, decrease treatment period, children recovery and pain (Watt *et al.*, 2011). The other treatment doing by parents is complementary therapy. They use herbal medicine, for example is jamu, temulawak, temuireng and propolis, honey, dates, white turmeric, guava leaves and mangosten. Traditional medicine effected javanese cultural is jamu, temulawak, temuireng and white turmeric.

Jamu come from Javanese that means traditional medicine from plants. Composition of this are plats from family *Zingiberaceae* (Ruslan, Bos, Kayser, Woerdenbag, & Quax, n.d.). Temulawak, temuireng and white turmeric consist of curcumin. It induced apoptosis T helper 1 cell through JNK (Jun-amino terminal

kinase) and ERK (extracellular regulated kinase) and recommended for *acute monosit leukemia* (Yang *et al.*, 2012).

Honey effective on healing oral mucocitis after cemotherapy than olive oil-propolis and propolis (Abdulrhman, Elbarbary, Ahmed, & Ebrahim, 2012). Active substance in honey can inhibit tumor cell growth or cancer by regulating cell cycle, mitochondrial pathway activation, induction of mitochondrial outside the permeable membranes, induction of apoptosis, oxidative stress modulation, amelioration of inflammation, modulation of insulin signaling and inhibition of angiogenesis (Erejuwa, Sulaiman, & Wahab, 2014).

In caring children with cancer, parent faced change role (Clarke, Mccarthy, Downie, Ashley, & Anderson, 2009), they delegates their role to another family member. Caregiver role was done by people who have family relationship. In women with ca mammae, caring healthy children doing by other family members (Coyne, Wollin, & Creedy, 2012). This condition assumed that parents want to persist family structure on crisis situation.

CONCLUSION

During the illness, parent changing role by delegates their role in caring health children and fulfill the need to other family members. Although on this research have early established that parents do plan action after the children was diagnosed ALL, more follow up were needed to other research to explore home care needed for children with ALL during or following the treatment.

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PROGRESIVE MUSCLE RELAXATION IMPROVE THE QUALITY OF SLEEP ON POSTPARTUM WOMEN

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ABSTRACT

Introduction: Postpartum women expect to have a good sleep quality with short sleep duration. Good quality sleep can reduce the risk of postpartum blues. The aim of this study was to analyze the effect of progressive muscle relaxation exercise in improving sleep quality postpartum women. **Method:** This research used Quasy- Experimental method with purposive sampling technique. Samples were taken from 12 villages in the district Kandat. There were 19 respondents in each treatment group and the control. Independent variable in this study was a progressive muscle relaxation exercise. The dependent variable was the quality of sleep in postpartum women. Data was collected by questionnaire PSQI. Analysis on the data in each group used the Wilcoxon test. Comparative analysis for the 2 groups used the Mann Whitney test. This study used a significance of $\alpha = 0.05$. **Result:** Wilcoxon test analysis results showed that there were changes in sleep quality in the treatment group ($p = 0,003$). Whereas the control group did not change ($p = 0,157$). Mann Whitney test results showed that compared with the control group, there was an increase in the quality of sleep in the treatment group ($p = 0.000$). **Conclusion:** The results of this study concluded that progressive muscle relaxation exercises can used as an effort to improve the quality of sleep for postpartum women. Progressive muscle relaxation is an alternative interventions to solve the issue of maternal postpartum sleep quality.

Key words: postpartum, relaxation, quality of sleep, PSQI, PMR

Prediction of Preeclampsia by a Combination of Body Mass Index (BMI), Mean Arterial Pressure (MAP), and Roll Over Test (ROT)

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ABSTRACT

Introduction One of the main causes maternal and infant mortality is preeclampsia. Preeclampsia is a disease of the theory and attacking multiple organs, making it difficult for handling. It indicates preventive interventions as early as possible by using a predictor preeclampsia. Has done a lot of studies to find effective predictors of preeclampsia, but have not found a single accurate predictor. This study aims to determine the effectiveness of the combination of predictors of IMT, MAP, and ROT in predicting preeclampsia. **Method** This research was carried out on all pregnant women with gestational age of 22-32 weeks who visit the Pacar Keling Public Health Centre of Surabaya in October-November, 2015. All over sample was measured BMI, MAP, and ROT, further observation until delivery. Data were analyzed descriptively, predictor combination of BMI, MAP, and ROT declared effective if $\geq 90\%$ of women who had two or more positive signs experienced preeclampsia. **Result** The combination of IMT, ROT, and MAP obtained 85% of pregnant women declared positif. On further observation, 90% of mothers who stated positive after evaluated experiencing preeclampsia. **Discussion** Predictors combination of IMT, ROT, and MAP have a tendency to be effective in predicting Preeclampsia. The results of this study suggest that the combination of predictors of IMT, ROT, and MAP is used as a screening in all pregnant women.

Key words : Body Mass Index, Mean Arterial Pressure, Roll Over Test, Preeclampsia, Predictor

INTRODUCTION

Until now, maternal and infant mortality rates are still high. One of the causes of death of mother and fetus is preeklampsi after bleeding as a direct cause-specific maternal mortality (Kelly, 2007). In Surabaya, maternal death due to preeclampsia reached 20% and infant mortality rates ranging from 28% (Bahari, 2009). Various interventions and studies have been made to reduce maternal mortality, especially in preeklampsi, but until now the death rate from preeklampsi very difficult to be lowered. Based on this, it is necessary to intervene more emphasis on prevention preeklampsi early as possible through early detection methods by using the predictors. From some research on predictors preeklampsi, shows that the determination of BMI, MAP, and ROT have greater significance than the other techniques.

In addition to having a high significance, the three predictors such a way that a simple prediction, not a high cost, can be done by a doctor, nurse, midwife, or a trained cadres, and does not require sophisticated equipment. However, use of these predictors is still singly or separately. Then the combination of the three can be considered a predictor of its use as a predictor to predict preeklampsi mainly at health care centers diperifer. General of aim this research was to determine the effectiveness of using a combination of BMI, MAP, and ROT in predicting preeklampsi in Community Health Centres Pacarkeling Surabaya. Special aim this research are knowing combination value of BMI, MAP, and ROT of primigravida, insidens of preeklampsi and analyze effectiveness of combined IMT, MAP, and ROT in predicting preeklampsi.

METHOD

Design of this study was analytic research observational with cohort approach. The sample in this study was pregnant women with gestational age of 22-32 weeks who visit the Community Health Center Pacarkeling Surabaya in June to November 2015 and determined by

Analysis of Combination of IMT, ROT, and MAP of Primigravida	f	%
Positive	17	85
Negative	03	15
Total	20	100

Tabel 2. Insidens of Preeclampsia at Community Health Centre of Pacarkeling Surabaya, December 2016

Value of	Observe Result
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accidental sampling. All pregnant women who have been elected to the respondents, conducted measurement of IMT, MAP, and ROT.

Roll Over Test (ROT) is the measurement of blood pressure in two different positions, namely on the left side sleeping position and supine sleeping position (ROT). ROT is said to be positive if a change/ increase in diastolic blood pressure between the side sleeping position and supine ≥ 15 mmHg and negative when changes diastole <15 mmHg.

Mean Arterial Pressure (MAP) is the average value of arterial pressure were assessed by measuring the pressure of diastole and systole, and then determines the mean value of the artery. MAP is said to be positive if the result > 90 mmHg, negative if the result is <90 mmHg.

Body mass index (BMI) is a calculation of the value taken from the body weight (BW) and height (TB) of pregnant women. IMT is said to be positive if the result > 28 mmHg, negative if the result is <28 .

The result of the combination is said to be positive if the value of BMI, MAP, or positive ROT more than 2, said to be negative when the value of BMI, MAP, or ROT in pregnant women only 1 positive.

Furthermore, all respondents followed her pregnancy until delivery, to observe whether the experience preeclampsia. Pregnant women are diagnosed with preeclampsia, if during pregnancy for up to 1 week post partum increased blood pressure greater than 140/80 mmHg.

Furthermore, the data were analyzed descriptively. The combination of BMI, MAP, and ROT declared effective as a predictor preeklampsi if it is equal to 90% of pregnant women who tested positive, experienced preeklampsi.

RESULTS

Table 1. Analysis of Combination of IMT, ROT, and MAP of Primigravida at Community Health Centre Pacarkeling of Surabaya, October to November 2015

Combination BMI, MAP, and ROT	Positive Preeclampsia (%)	Nothing Preeclampsia (%)	Not Yet Finish Observe (%)	Total (%)
Positive	7 (41,18)	1 (05,88)	9 (52,94)	17 (85)
Negative	-	1 (33,33)	2 (66,67)	03 (15)
Total	7 (35%)	2 (10)	11 (55)	20 (100)

on Table 2, it appears that the combination of IMT, ROT, and MAP have a tendency to be effective in predicting the incidence of early preeclampsia in Community Health Centres Pacarkeling Surabaya. It is based on evidence that from 8 pregnant women who have a positive predictor factor, after an evaluation, including seven pregnant women (90%) had signs preeclampsia.

DISCUSSION

In this study showed that most (60%) of pregnant women with a body mass index greater equal to 28, the majority of pregnant women (65%) with the result ROT greater equal to 15, and nearly all (90%) had a value of MAP greater equal to 90. this is consistent with the theory that an increase in body weight of pregnant women occurs in the second and third trimester of pregnancy.

Moreover, according to some studies found that the factors that may influence the occurrence of preeclampsia is aged less than 20 years old or over 35 years, an increase in body mass index, primiparous (women giving birth for the first time), the size of the placenta were great, mom smoking, primigravidae young, distended uterus excessive, a history of preeclampsia, history of hypertension, multiple pregnancy, and diseases that accompany pregnancy such as diabetes mellitus and obesity (Cunningham, 2005; Fortner et al, 2009; Djannah, Nur & Arianti 2010; Langelo, Arsin & Russeng, 2011).

In this study found that the study subjects are at the second and third trimester of pregnancy resulting in increased body weight is physiologically in pregnant women.

The study also illustrates that the majority (85%) of pregnant women tested positive for preeclampsia predicted to experience the pregnancy. Women with excessive nutritional status or BMI obesity is said to have a high risk of pregnancy such as miscarriage, operative delivery, pre-eclampsia, thromboembolism, perinatal mortality, and makrosomia (Sujiyatini, 2009).

The increase in diastolic ≥ 20 mmHg measured when side sleeping position changed to supine

indicate that the mother has the potential to experience preeclampsia. This test is shown to have a sensitivity 88%, specificity 95%, positive predictive value of 93% (Matsubara, K, Matsubara, Y, and Ito, M, 2009).

In the study conducted Roberts et al (2011) showed pregnant women with excess weight gain will produce excess fat anyway. The fat will produce CRP (C-Reactive Protein) and inflammatory cytokines (IL-6) were more anyway. CRP is an acute phase reactant that is made in adipose tissue and increases in early pregnancy. While IL-6 (Interleukin 6), is a major stimulator of acute phase reactants which have an effect on the blood vessel wall and the coagulation system, inflammatory mediators are produced in adipose tissue. The increase in CRP and IL-6 will contribute more to the incidence of oxidative stress. Oxidative stress along with toxic substances derived from excess fat will stimulate endothelial damage to the blood vessels, called endothelial dysfunction. In endothelial dysfunction there is an imbalance of nutrients that act as vasodilator with vasoconstrictor (Endothelin I, thromboxane, angiotensin II) so that there will be extensive vasoconstriction and hypertension pass (Hillier et al, 2007). The condition was also supported by theoretical concepts Manuaba (2008) which explains that there is a match between the theoretical concepts with events in the field of research that obesity can affect pre-eclampsia in pregnancy.

Based on statistical data of research subjects can be seen that positive pregnant women with preeclampsia are detected with a BMI > 28 . This fits the theory that pregnant women with a BMI > 28 at risk of developing preeclampsia. But in most of the study subjects have not been able to evaluate the incidence of preeclampsia considering pregnancy is still ongoing.

CONCLUSION AND RECOMMENDATION

Conclusion

This study concluded that the majority of pregnant women in public health centers Pacarkeling Surabaya: have a positive value on

the combination of IMT, ROT, and MAP, and most also experienced preeklampsia. That is to say a combination of IMT, ROT, and MAP have a tendency to be effective in predicting early preeklampsia.

Recommendation

Based on this, the midwife at the health center is recommended that checks the combination of IMT, ROT, and MAP to the entire second trimester pregnant women who visit, and immediately made a referral if there exists a positive combination values. For the next researcher advised to conduct similar studies with the number of respondents and the location for more research. The maternity nursing teacher suggested that developing course material about early detection preeklampsia.

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ANALYSIS FACTORS OF UNSAFE SEXUAL BEHAVIOR IN ADOLESCENT AT MUSI BANYUASIN OF SOUTH SUMATERA

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ABSTRACT

Introduction: Problems related to adolescent reproductive behavior and such as sexually transmitted diseases, HIV/AIDS, the death of a young mother, widespread practice of abortion and the youth tendency to engage in premarital sex. In Musi Banyuasin there are 7754 high school students, many students have dropped out of school because they get pregnant before marriage so that in adolescence their parents are forced to marry or have abortions. The aim study is determined the factors associated with unsafe sexual behavior in adolescents in high school. **Method:** observational research with cross sectional and quantitative approach. The population is high school students. Sampling technique was using multistage random sampling obtained 380 samples. Bivariate analysis, chi-square and multivariate multiple regression analysis. **Result:** the result showed a correlation between knowledge with adolescent sexual behavior p-value (0.007). There was no relationship between gender, residence, maternal education, media pornography, and economic status with sexual behavior because the result more than p-value 0,005. There was a relationship between the influence of peers with sexual behavior p-value (0.000). Results of multivariate analysis, the effect of peer environment has p-value = (0.000) means significant with OR = 2.755, 95% CI = 1.755 to 4326), meaning that adolescents are affected by possibility peer environment 2.7 times likelier to have unsafe sexual behavior. **Conclusion:** Necessary to be given positive and creative means to adolescent and give biological support through expression of psychological and physical such as sports, religious activities, and activities of potential and talent.

Key words: Unsafe Sexual, Adolescent, Behavior, Analysis Factors

INTRODUCTION

Indonesian adolescent is currently experiencing rapid social changes from a traditional society to the modern society, which also changed the norms, values, and their lifestyle (Adioetomo, et.al, 2002). Various institutions in Indonesia for the period of 1993-2002, found that five to ten percent of women and eighteen to thirty-eight per cent of young men aged 16-24 years have had sexual intercourse before marriage with a partner of their own age (Hasmi, 2011).

Reproductive Health Survey data of Indonesian teenagers last National Family Planning Coordinating Board (BKKBN) said as many as 5912 women aged 15-19 years at national level had sexual intercourse. While men in the same age totaled 6578, or 3.7% have had sex. But surprisingly the case of pre-marital sex is actually happening in the countryside. When viewed from a presentation point between urban

and rural, the village is bigger than the urban. Urban 0.9%, 1.7% that the countryside. The reason, the education level is lower villagers effect on sex. Not completed or not completed primary school there was 4.2% for women and 6.5% for men. Complete primary school for women 1.4%, while 4.7% of men. As for who did not finish high school for women 1.1%, while 5.4% of men. Graduates over high school, from D1-S1 at 1.1% for women and 8.6% for men (IDHS, 2007).

Child Protection Commission (KPA) in 2008 showed 62.7% of middle and high school adolescents have had sex before marriage, 93.7% of adolescents had done kissing, oral sex and genital stimulation. Then 97% of teenagers had never watched a porn movie, 25% of teenagers had an abortion because she was pregnant out of marriage.

METHODS

The study design was using observational cross-sectional quantitative approach. The population in this study were adolescents aged 15-18 years who are student of high school in the Musi Banyuasin Regency 2014 amounted to 7754 students and obtained a total sample of 380 samples

Criteria for inclusion Boys and girls teenagers, Aged 15-18 years who attended high school in Banyuasin, never or in dating and willing to be a subject of study or as respondent

RESULT

Univariate Analysis

Unsafe sexual behavior

Based on table 1 that adolescent who has sexual behavior categorized as good as 265 (67,5%) is bigger when compared to that of his sexual behavior worse as many as 128 people (32.6%)

Adolescent knowledge

Based on table 2 for respondents with good knowledge of as many as 73 (18.6%) is smaller when compared to the lack of knowledge that 320 (81.4%)

Gender/Sex

Based on table 3 above table respondents who had sex as many as 166 men (42.2%) lower when compared to as many as 227 women (57.8%)

The influence of peer environment

Based on table 4 above table respondents are influenced by peers as many as 207 (52.7%) is bigger when compared to the uninfluenced as many as 186 (47.3%).

Residence

Based on table 5 above table includes that adolescent who stay in bad category (not living with parents) as many as 83 (21.1%) is smaller than who stay in good category as many as 310 (78.9%).

Exposure of Pornographic Media

Based on table 6 above that adolescents who have been exposed pornographic media for 304 (77.4%) is bigger than never exposed as many as 89 (22.6%)

Mother's Education

Based on table 7 above that adolescent mother's education low as 225 (57.3%) higher when compared to mother's respondents included higher education in the amount of 168 (42.7%)

Family Economic Status

Based on table 8, it can be concluded that the adolescent belonging to the family's economic status higher as 257 (65.4%) is bigger than the economic low status as 136 (34.6%).

Bivariate Analysis

Correlation Between Respondent's Knowledge with Unsafe Sexual of Adolescent Behavior. From the table 9 above, adolescent who has a good knowledge and good sexual behavior as many as 39 (53.4%) lower when compared to adolescent who have lest knowledge and bad sexual behavior as many as 226 (70.6%). Based on the statistical test Chi-square was obtained p-value = 0.007 (p-value <0.05) means that there was a relationship between knowledge with adolescent sexual behavior and results Odds Ratio (OR) is 0.477, which means students including good knowledge of 0.47 times as likely sexual behave well.

Correlation Between Respondent's Gender with Unsafe Sexual of Adolescent Behavior

From the table 10 above table adolescent who has a male gender and sexual well-behaved as many as 104 people (62.7%) lower when compared to adolescent who have a female gender and sexual well-behaved as many as 166 (70.9%). Based on the statistical test Chi-square was obtained p-value = 0.105 (p-value >0.05) this indicates that there was no relationship between gender and Sexual Behavior of adolescent and the results of Odds Ratio (OR) was 0.688 (CI 0,449- 1,052), which means that students who included male gender of 0.69 times as likely to sexually behave well

Correlation Between Influence of Peer

Environment with Unsafe Sexual of Adolescent Behavior.

From the above table adolescents are influenced by peers and sexual behavior 118 people (57%) lower when compared to adolescent who are not sexually influenced but well behaved as many as 147 (79%). Based on the statistical test Chi-square was obtained p-value = 0.000 (p-value <0.05) suggesting that there is a relationship between the influence of

peers with Sexual Behavior of adolescent and the results of Odds Ratio (OR) is 0.362, which means students are included impressionable 0.36 times more likely to sexually behave well Table 11.

Correlation Between Respondent's Residence with Unsafe Sexual of Adolescent Behavior

From the table 12 above that adolescents who lived categorized as good and well-behaved sexually as many as 207 (66.8%) lower when compared to adolescents who lived in bad residence but good sexual behavior as many as 58 (69.9%). Based on the statistical test by using Chi-square was obtained p-value = 0.686 (p-value > 0.05) this indicates that there was no relationship between residence with Sexual Behavior of adolescent and the results of Odds Ratio (OR) is 0.866, which means students including good place 0.87 times tend to good sexual behave.

Correlation Between Mother's Respondent Education with Unsafe Sexual of adolescent Behavior

From the table 13 above that adolescent mothers including low category education and adolescent good sexual behavior as 157 (69.8%) is bigger when compared to adolescent who had high mother education but good sexual behavior as many as 108 (64.3%). Based on the statistical test by using Chi-square was obtained p-value = 0.298 (p-value > 0.05) this indicates that there was no relationship between mother's education with sexual behavior of adolescent and the results of Odds Ratio (OR) is 0.298, which means students including high mother's education tends to behave sexually 0.29 times better.

Correlation Between Exposure of Pornographic Media with Sexual Behavior

From table 14 above that adolescents who have been exposed to pornographic media and good

sexual behavior of 200 (65.8%) lower when compared to adolescent who never exposed but well-behaved sexually as many as 65 (73%). Based on the statistical test by using Chi-square was obtained p-value = 0.248 (p-value > 0.05) this indicates that there was no relationship between media pornography with sexual behavior of adolescent and the results of Odds Ratio (OR) is 0.248, which means students are included ever seen pornographic media 0.24 times more likely to sexually behave well
Correlation

Between Family's Economic Status with Sexual Behavior

From table 15 above that adolescents which low economic status and good sexual behavior as many as 99 (72.8%) is bigger when compared to adolescent who are high family's economic status but good sexual behavior as many as 166 (64.6%). Based on the statistical test by using Chi-square was obtained p-value = 0.099 (p-value > 0.05) this indicates that there was no relationship between the economic status of the sexual behavior of adolescent and the results of Odds Ratio (OR) is 1.467, which means the students belonging to the category of high economic status tend to behave better sexually.

Multivariate Analysis

Based on the result of analysis statistic with significance p-value < 0.05, so knowledge variable has significance variable (p-value 0.014. OR 1.952 CI 95 % 1.144- 3.330) which means adolescent with less knowledge probably 1,9 times will do unsafe sexual. Infulence of pees environment has p-value 0,000 it means significance with (OR 2.755 CI 95% = 1,755-- 4.326) it means that aldoscent which has beeb influenced of peer environmen probably 2.7 times will do unsafe sexual behavior Table 16.

Table 1. Frequency Distribution of adolescent Unsafe Sexual Behavior

NO	Adolescent Sexual Behavior	Frequency	%
1	Good	265	67,4
2	Bad	128	32,6
Total		393	100

Table 2. Frequency Distribution Based on Category of Adolescent Knowledge

No	Adolescent Knowledge	Frequency	%
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1	Good	73	18,6
2	Lack	320	81,4
Total		393	100

Table 3. Frequency Distribution Based on Category of Adolescent Gender

No	Gender	Frequency	%
1	Male	166	42,2
2	Female	227	57,8
Total		393	100

Table 4. Frequency Distribution Based on Category of Adolescent Influence of Peer Environment

No	Adolescent Influent of Peer Environment	Frequency	%
1	Influenced	207	52,7
2	Uninfluenced	186	47,3
Total		393	100

Table 5. Frequency Distribution Based on Category of Adolescent Residence

No	Residence	Frequency	%
1	Good	310	78,9
2	Not Good	83	21,1
Total		393	100

Table 6. Frequency Distribution Based on Category of adolescent with Exposure of Pornographic Media

No	Exposure of Pornographic Media	Frequency	%
1	Ever	304	77,4
2	Never	89	22,6
Total		393	100

Table 7 Frequency Distribution Based on Category of Adolescent Mother's Education

No	Mother's Education	Frequency	%
1	Low	225	57,3
2	High	168	42,7
Total		393	100

Table 8 Frequency Distribution Based on Category of Adolescent's Family Economic Status

No	Family's Economic Status	Frequency	%
1	Low	136	34,6
2	High	257	65,4
Total		393	100

Table 9 Distribution of Correlation Between Knowledge with Adolescent Unsafe Sexual Behavior

Knowledge	Sexual Behavior				Total	Percentase
	Good		Bad			
	n	%	n	%		
1. Good	39	53,4	34	46,6	73	100 %
2. Bad	226	70,6	94	29,4	320	100%

Table 10. Distribution of Correlation Between Gender with Unsafe Sexual of Adolescent Behavior

Gender	Sexual Behavior	Total	Percentase
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	Good		Bad			
	n	%	n	%		
Male	104	62,7	62	37,3	166	100 %
Female	161	70,9	66	29,1	227	100%

Table 11. Distribution of Correlation Between Influence of Peer Environment with Unsafe Sexual of Adolescent Behavior

Environment Influenced	Sexual Behavior				Total	Percentase
	Good		Bad			
	n	%	n	%		
Influenced	118	57	89	43	207	100 %
uninfluenced	147	79,0	39	21,0	186	100%

Table 12. Distribution of Correlation Between Respondent's Residence with Unsafe Sexual of Adolescent Behavior

Residence	Sexual Behavior				Total	Percentase
	Good		Bad			
	n	%	n	%		
Good	207	66,8	103	33,2	310	100 %
Bad	58	69.9	25	30,1	83	100%

Table 13. Distribution of Correlation Between Mother's Respondent Education with Unsafe Sexual of adolescent Behavior

Mother's Education	Sexual Behavior				Total	Percentase
	Good		Bad			
	n	%	n	%		
Low	157	69,8	68	30,2	225	100 %
High	108	64,3	60	35.7	168	100%

Table 14. Distribution of Correlation Between Exposure of Pornographic Media with Sexual Behavior

Pornographic Media	Sexual Behavior				Total	Percentase
	Good		Bad			
	n	%	n	%		
Ever	200	65,8	104	34,2	304	100 %
Never	65	73	24	27	89	100%

Table 15. Distribution of Correlation Between Family's Economic Status with Sexual Behavior

Family's Economic Status	Sexual Behavior				Total	Percentase
	Good		Bad			
	n	%	n	%		

Low	99	72,8	37	27,2	136	100 %
High	166	64,6	91	35,4	257	100%
P-value = 0,099			OR =1,467 (CI 95%, 930- 2.314)			

Table 16. Distribution of Significance Level and Pre-Modeling Dependent Variable with Independent Variable

No	Variable	p-value	Exp (B)	CI 95%		Model
				Lower	Upper	
1	Knowledge	0,015	1,967	1,123	3,358	*
2	Gender	0,300	1,291	0,813	2,156	--
3	Influence of Peer Environment Residence	0, 000	2,676	1,696	4,283	*-
4	Pornographic Media	0,437	1,244	0,717	2,161	-
5	Family's Economic Status	0,996	0,998	,537	1,787	-
6		0,097	0,668	0,441	1,066	-

Variable Processing Result as Simultan with Logistic Regression

Variabel	β	Wald	OR	95 % CI		P-value
				Lower	Upper	
Knowledge	0,669	6.024	1.952	1.144	3.330	0.014
Influence of Peer Environmen	1,013	19.389	2,755	1,755	4.326	0.000

DISCUSSION

Correlation between knowledge with unsafe sexual of adolescent behavior. According Syafrudin (2008) the knowledge that half is even more dangerous than not know at all. The results are consistent with research Nanik (2010) showed that there was statistically significant relationship between unsafe sexual behavior toward reproductive health knowledge with $P = 0.000$ with an alpha of 0.05. There is a statistically significant relationship between sexual behavior of adolescents aged 15-24 years with the knowledge of prevention of sexually transmitted infections with $P = 0.000$ at 0.05 alpha.

Correlation between gender with unsafe sexual of adolescent behavior. Adolescent Health Survey of Indonesia stated that as many as 57.5 percent of men aged 20-24 years who are not married have a friend had sexual intercourse and as much as 43.8 per cent were aged 15-19 years. While as many as 63 percent of women aged 20-24 years who have not married friend had sexual intercourse, women aged 15-19 years who have not married friend had sexual intercourse as much as 42.3 percent.

Correlation between influence of peer environment with unsafe sexual of adolescent behavior. This study coincides with findings Maryatun (2012) on teenagers in SMA Muhammadiyah Surakarta III in 2012 is known to have a meaningful relationship between neighborhood peers in adolescent sexual behavior premises p value $0.001 < 0.05$ and value OR 19.727.

Correlation between residence with unsafe sexual of adolescent behavior. Based on the research results Asset et al in 2010 in SMA N 1 Tawang Sari Sukoharjo, amounting to 869 students. The research sample as many as 274 students with methods of determining the sample cluster random sampling. From the results of Chi Square test relationships parenting parents with adolescent attitude about sex that is, compute the probability value (p-value) is less than 0.05 ($0.001 < 0.05$), the decision is to reject H_0 research, meaning that there has been a significant parenting parents with adolescent attitudes about sex.

Correlation between exposure of pornographic media with unsafe sexual of adolescent behavior. Ririn research results in adolescent high school in Surakarta (2009) there is a link resources with adolescent premarital

sexual behavior (-v-alue 0.022) existing sources of internet, TV, mobile phones, VCD, Video porno, friend, posters and so forth.

Correlation between mother's education with unsafe sexual of adolescent behavior. Low parental education so as to provide reproductive health information small, the small role of parents to provide reproductive health information and sexuality caused by poor parental knowledge about reproductive health and taboo when talking about reproductive health. when parents feel to have knowledge about reproductive health is deep enough youth are more confident and not feel awkward to discuss topics related to the problem of premarital sex (Hurlock, 2004).

Correlation between family's economic status with unsafe sexual of adolescent behavior. This is in contrast with research Rahma (2013) in public SMA 5 Jagong Joget Central Aceh Takengon showed no relationship between economic status with adolescent sexual behavior with p value 0.008 <0.05 at the 95% CI.

CONCLUSION

The influence of environmental variables more dominant peer relationship with adolescent sexual behavior is unsafe after being controlled by the variable Knowledge. With 0:00 pvalue and value OR of 2.75 (95% C.I = 1.755 to 4326) and expected family can control the influence of peers on adolescent sexual behavior because it has a very important role in increasing stages of adolescent sexual behavior in dating.

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MATERNAL DOMINANT COMMUNICATION TO FETUS IN BPS HJ. BASHORI WONOREJO SURABAYA

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ABSTRACT

Introduction: Many pregnant women who ignore communication with the fetus as invited talk, loud music, providing the touch. When communication with the fetus not done will hinder the intelligence of the brain. Research objectives maternal dominant communication to fetus in BPS Hj .Bashori Wonorejo Surabaya. **Methods:** The design of this research is descriptive. With a population of pregnant women throughout the research trimester II and III trimester of pregnancy checked in BPS Hj. Bashori Wonorejo Surabaya 30 respondents. Taken with the total sampling techniques. Research communication variable dominant mother pregnant with a fetus. Data collection with the questionnaire. Processing are analyzed in a descriptive with the frequency distribution. **Results:** The research results obtained maternal dominant communications to fetus is almost entirely (93,3%) stroking the belly when the fetus moving and kicking, almost entirely (93,3%) read out the verses of the Holy quran, most (70%) listened to music during pregnancy, most (63,3%) invited talk, half (43.3%), singing a small part (23.3%) read out a story or storytelling and a small proportion (6%) to introduce the numbers. **Discussion:** Summary of the research was maternal dominant communication to fetus was stroking the belly when the fetus moving and kicking and reciting verses from the Holy quran is recommended for pregnant women further enhance communication with the fetus using way more in price and easy to do. It's expected to nurses as health care givers can facilitate and provide health education about the importance of communication with a fetus early on.

Keywords: communications, fetus, pregnant women

INTRODUCTION

The first communication of the fetus is by way of kicking, and moving in the womb. The movements of the fetus in the belly can be interpreted as a typical greeting to the expectant mother, fetal movement felt the moment it will be good reply with stroking also chatted with the fetus, give advice – advice and useful lessons for future live (Hidajati, 2010). Invites the fetus is talking is a way to stimulate his invite for dialogue. The fetus will know the affection and love from her parents, her presence was expected if the fetus were invited to speak and was given affection via touch, caress, and sweep. Today many parents who ignore communication (invited talk, listen to the sound, providing the touch) with fetus for example was never invited to speak

Communication is important since in the womb made in forming the inner bond mother and child. First touch between mother

and child is something special. Because touch is a medium of communication and the first thing that can be felt from the overall development of the fetus senses. Not just a touch is all important, the stimulation while still in the womb is crucial to optimize the performance of both cerebral hemispheres on the fetus. Fetal brain cells growing more active. This is beneficial to the growth of the left brain and the right brain of the fetus, so that the left and right brain function becomes balanced. Other benefits include the child grow up to be strong, to have personal confidence high, able to absorb many things, understanding the feelings of others or being able to empathize, as well as better prepared in learning environment. Besides good communication with the fetus can stimulate motion, fetal heart rate, as well as stimulate the creativity and intelligence of children (Rusdie, 2012).

Communication with the fetus is done with the aim to build character, proximity to a

heart fruit, as well as develop and improve intelligence. To achieve optimal results, as well as the role of midwives in antenatal care services is very important in increasing the knowledge of mothers about how communication with the fetus for example by providing information through leaflets, as well as counseling, counseling that it can aid in the improvement of the knowledge of the mother in communicating and stimulate the fetus. Therefore, the aim of this study was to know maternal dominant communication to fetus in BPS Hj. Bashori Wonorejo Surabaya.

METHOD

The design used in this research is descriptive for the purpose of knowing maternal dominant communication to fetus in BPS Hj. Bashori Wonorejo Surabaya. The population in this research is the whole entire trimester pregnant mothers II and III trimester of pregnancy checked in BPS Hj. Bashori Wonorejo Surabaya by 30 people. The sample in this research is the entire population of pregnant women that check in BPS Hj. Bashori Wonorejo Surabaya by 30 people. The sampling techniques used are non probability sampling with the total sampling. The variable is the dominant communication research of pregnant women on fetus. The instruments used in the collection of data in the form of a closed questionnaire. This research will be held in BPS Hj. Bashori Wonorejo Surabaya. As for the choice of location based reasons: research has not been done with the same theme ... Time doing research in March 2015. Before doing the data collection process researchers first filed a licence on Dean FKK UNUSA Then the letter handed over to the leadership of the BPS Hj. Bashori Wonorejo Surabaya. After obtaining licences held respondents to approach to the approval process and data retrieval. Researchers conducted a study for 4 days in 1 day researchers spread a detailed questionnaire as many as 7-8 questionnaire in accordance with the number of patients that there are appropriate criteria. Sheets will be filled by questionnaire respondents, the respondent had previously given an explanation in advance by researchers about how the filling. A detailed questionnaire filled out by the respondent by answering questions from the questionnaire honestly in accordance with the knowledge owned by the respondent. The interview was

conducted on May 4, 2015-7 may 2015 when respondents fill out a detailed questionnaire.

RESULT

Table 1 frequency distribution of respondents based on age in the BPS Hj. Bashori Wonorejo Surabaya May 2015

Age (Years)	Frequency	Percentage (%)
<20 (late teens)	2	6,7
21-40 (adult)	26	86,6
41-65 (adult end)	2	6,7
The number	30	100

Table 2 frequency distribution reponden based on gravida at BPS Hj. Bashori Wonorejo Surabaya May 2015

Parity	Frequency	Percentage (%)
Primigravida	7	23,3
Multigravida	23	66,7
Grandemultigravida	0	0
The number	30	100

Based on the above table 1 shows that of the 30 respondents, almost entirely (86,6%) aged 21-40 years. Based on the above table 2 shows that 30 respondents most (66,7%) multigravida

Table 3 frequency distribution of respondents based on the level of education in the BPS Hj. Bashori Wonorejo Surabaya in may 2015.

Educational	Frequency	Percentage(%)
Basic	10	33,3
Medium	14	46,7
High	6	20
The number	30	100

Based on table 3 shows that almost half of respondents from 30 (46,7%) had secondary education.

Table 4 frequency distribution of Respondents based on a work at BPS Hj. Bashori Wonorejo Surabaya May 2015

Job	Frequency	Percentage (%)
Not working	13	43,3
Work	17	56,7
The	30	100

number

Based on table 4 show that of the 30 respondents (56.7%) most of the work.

Table 5 Distribution frequency of Respondents communication dominan pregnant women on fetus in BPS Wonorejo Hj. Bashori Surabaya May 2015

Communication	Frequency	Percentage (%)
Belly Petted	28	93,3
Invited talk	19	63
Reciting stories or storytelling	7	23,3
Singing	13	43,3
Introduce the numbers	2	6
Loud music	21	70
Reciting verses from the Holy Qur'an	28	93,3
The number	30	100

Based on table 5 shows that out of the 30 respondents obtained almost entirely (93,3%) stroking the belly when the fetus moving and kicking, almost entirely (93,3%) read out the verses of the Holy quran, most (70%) listened to music during pregnancy, most (63,3%) invited talk, half (43,3%), singing a small part (23.3%) read out a story or storytelling and a small proportion (6%) introduces the numbers.

DISCUSSION

Based on the discussion table 5, 28 participants known communications almost entirely respondents pregnant women on fetus. Based on the results of the rekapitulasi questionnaire respondents showed mostly communicate by way of stroking the belly. Stroking the belly is the easiest way do expectant mothers in the form of emotional closeness with the fetus, in addition to most easily stroking the belly didn't confiscate a lot of time. This is in accordance with the opinion of Andriana (2011) touch the mother on her son while still in the womb is something important in forming the inner bond between mother and child. In addition to stroking the belly of most respondents communicated the fetus by way of reciting the verses of the Holy Qur'an. Reciting verses from the Holy Qur'an is a way of educating children since in the womb and recited verses of the Holy Qur'an is

recommended by the majority of the religious Muslim respondents. When the mother read the verses of the Qur'an while stroking the wall of the stomach, then surely the baby in the womb also heard chanting the verses of the Qur'an at the same time to feel the sensation . And in some cases, the baby replied to the vibration in order to later easily in studying the Qur'an. This is in accordance with the opinion of Hidajati (2010) teach a fetus say praise-praise to God, utter and recited prayers are beneficial for the good and safety especially for infants and mothers, will stimulate the intelligence of right and left brain.

Based on the results of questionnaire rekapitulasi most respondents do communication and stimulation of the fetus by way of listening to music in the fetus. Loud music on the fetus can stimulate the development of the fetus in the womb, in addition many respondents understood the way through social media. This is in accordance with the opinion of the Isna (2012) A regular and constant stimulation spurred intelligence brain auditory stimulation, gives a fetus that is good for the fetus and is helpful to education of the fetus. But not all types of music, just music soft and rhythmic regularly that can provide benefits. For example a quiet religious music and themed the positive. In addition to loud music, most of the respondents communicated the way invites speaking on the fetus. Invited talk, a way to establish the emotional closeness between a fetus with the mother, in addition to establish proximity invites talking fetus is the most easy and effective way to communicate. This is in accordance with the opinion of Wardani (2011) benefit often invites the fetus talking i.e. expedited the process of birth, as the inner contacts, invite the fetus talking can be a means to capture the vibrations of the soul. Based on the results of a questionnaire that half recap responden communication by way of singing to the fetus. Singing to the fetus is beneficial calming fetus, developing art and creativity. In addition to developing the arts and creativity, the majority of respondents have the hobby of singing and chanting for an easy way fetuses, can be done at any time. This is in accordance with the opinion of Rusdie (2012) sing for the fetus is a stimulus which many influential on the development of the right brain of the fetus. To maximize the left brain of the fetus, can sing the songs lyrics

order is clear and contains the good messages. From the results of the questionnaire showed a small part of the recap of the respondents communicated by way of reciting stories or storytelling on the fetus. The respondents assumed read out a story or storytelling done when the child is already born, in other words the respondents do not know that reciting stories or storytelling can be done since in the womb. Actually read out a story or fetal storytelling is a way of stimulating right brain and left, introduce new vocabulary, stimulates the intelligence of early on. For example tales about tales of the prophets, the story of a scientist, or folklore. This is in accordance with the opinion of Rusdie (2012) storytelling can grow imaginary power while taking a lesson or wisdom of fairy tales as told, the voice that is heard by the fetus will stimulate the growth of cells in the brain. Thus, the ability of the brain of the fetus in the capture and understand something be more optimal. Based on the results of questionnaire respondents fraction recapitulation introduced numbers on the fetus. The respondents contended that introduces the figures are considered less important in communicating with the fetus, but in fact introduce figures is auditory stimulation to the fetus. This is in accordance with the opinion of Rusdie (2012) provide stimulation with invited talks, recited a story book, make the figures so that the fetus know the basics of mathematics are verbal coaching fetal hearing and train mathematical intelligence. Factors that affect communication among other things the age, education, occupation, and parity. In table 5.1 age characteristics, indicates that of the 30 respondents obtained a large majority (86,6%) aged 21-40 years or early adulthood. Emotionally at the age of 21-40 years, people have been able to take the decision to fix the problem yourself. Age effect on the ability and readiness of the self in their mother kehamilansehingga doing active communication while pregnant. This is in line with the theory advanced by Papalia (2009) mother aged 21-40 years, referred to as adulthood which is expected at this time people have been able to solve the problems that faced with an emotionally calm, especially in dealing with pregnancy, childbirth, childbirth and caring for her baby.

Based on table 2 gravida, shows characteristics of the 30 respondents the

majority (60%) of pregnant second child (multigravida). Gravida respondents associated with first-time pregnant women experience are not experienced in communicating with the fetus. While the mother multigravida or mother ever get pregnant and give birth to more experienced in communicating with the fetus so that it can communicate with the active while pregnant. This is in accordance with the opinion of the Mubarak W (2007). Experience is a source of knowledge or experience it is a way to gain the knowledge of the truth. Therefore, any personal experiences can be used in an effort to gain knowledge.

CONCLUSION

A summary of the results of this research are maternal dominant communication to fetus in BPS Hj. Bashori Wonorejo Surabaya are abdomen while stroking the fetus moving and kicking and reciting verses from the Holy quran.

Advice for pregnant women further enhance communication with the fetus using way more in price and easy to do. It's expected to nurses as health care givers can facilitate and provide health education about the importance of communication with a fetus early on.

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THE EFFECTIVENESS OF THE PSYCHOEDUCATION TOILET TRAINING WITH DEMONSTRATION VIDEO AND CARD PICTURE TOWARD INCREASING MOTHER'S KNOWLEDGE AND ABILITY TO TOILET TRAINING TODDLER IN INFORMAL SCHOOL PLAY GROUP

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ABSTRACT

Introduction: The purpose of this research is to determine whether Psychoeducation with media video and picture card can increase mother knowledge and toilet training ability for toddler. **Method:** It is a quantitative research. This research is quasy experiment with pre and post test control group design non randomized. The population was devided into two group, experimental group and control group. It was all toddlers in informal school play group. The total sample is 30 toddlers. It was divided into two groups using purposive totally sampling technique. The data collection technique was : Mother Knowledge Scale; Observation sheet about toilet training ability; and Elimination toddler schedule in 24 hours. The analyzed of date using mann whitney u test & wilcoxon rank test with a signifikansi 5% ($\alpha = 0,05$). **Result:** The finding research showed that there was influence and Psychoeducation with demontration media video and picture card toward increasing mothers knowledge and toilet training ability for toddler. There was significant improvement (influence) in p value = 0.001 (p value < 0.05). **Discussion:** This result gave recomendation for play group and parents to give modeling media video and picture card about toilet training to increase mother knowledge and ability toilet training toddler.

Keyword : Psychoeducation,video, picture card, toilet training, toddler

INTRODUCTION

The first five years of life the child is beginning to the process of growing flower child, either physical or psikisnya. Children who can accomplish the task of growing important role at this stage will experience delay on the next flower growing stage (Wong, 2008). The age of the toddler (1-3 years) is a golden age because children in this age are experiencing growth and development a very quick. Psychological development in the age of a toddler is a great change from the phase of trust vs. not believe into a phase of autonomy vs. doubt malu, indicated by the attitude of self-reliance that is increasingly widespread. At this time the child can control the parts of his body, the ability to speak is increasing, and at this phase is also located on the anal phase where the child capable to control urination (BAK) and bowel movements (chapter) (Luxner, 2005).

One of the tasks the future development of toddler is toilet training. Toilet training in children is an attempt to train the child to be able to control the conduct of urination and defecation. Actions to exercise urinate and greater in children requires preparation both physically, psychologically and intellectually, through the preparation of the expected child is able to control the small bowel or individually (Hidayat, 2009). Toilet training requires a complex psychophysiological factors for readiness. The child must be able to recognize the urgency to issue and hold sensation elimination and able to communicate this to parents, on the other hand there may be a variety of motivations that are essential to satisfy the parents to hold, rather than satisfying itself with issuing elimination (Wong, 2008).

One important parental stimulation is stimulation of the child's independence in performing bowel and bladder. The habit of

bedwetting in children aged under 2 years is still regarded as a natural thing. Bedwetting child under 2 years is because children are not able to control the bladder completely. Wetting generally still brought up the age of 4-5 years. Cases found in Indonesia children aged 6 years still wet the bed about 12% (Asti, 2008). According to the research of the American Psychiatric Association, reported that 10-20% of children aged 5 years, 5% of children aged 10 years, nearly 2% of children aged 12-14 years, and 1% of children aged 18 years still wet (nocturnal enuresis), and the number of boy who wet the bed more than girls.

In addition to toilet training train a child in the control of bowel movements and little can also be useful in sex education because when children engage in that activity there own children learn anatomy and function. The process of toilet training is expected to take place settings impulses or stimuli and instincts of children in defecating or urinating and please note that defecation is a means of gratification to release the tension, with the exercise of children expected to defecate or small individually (Hidayat, 2009). Toilet training requires a complex psychophysiological factors for readiness. The child must be able to recognize the urgency to issue and hold sensation elimination and able to communicate this to parents, on the other hand there may be a variety of motivations that are essential to satisfy the parents to hold, rather than satisfying itself with issuing elimination (Wong, 2008).

According to the theory of Sigmund Freud in this phase it is time children are trained to defecate or toilet training (bowel training in place). Children can also show some of its parts make up two words danmengulang new words. Toddler age children (1-3 years) who are in the anal phase is characterized by the development of satisfaction (kateksis) and dissatisfaction (antikateksis) around the function of elimination (Luxner, 2005).Based on observations and interviews of researchers, with mothers Daycare and Preschool in the region Ketintang Surabaya by interviewing 10 mothers who have children aged 2-3 years to identify problems toilet training in children ages toddler, found that as many as 7 people mothers of children 2-3 years of age declared to choose to use diapers for the reason that is

more practical and not enough time to their children because of work, one person mothers of children aged 29 months to say that her son had problems when going BAB thus requiring to use diapers, and as many as 2 mothers children aged 2-3 years have declared their already successful in applying toilet training and was able to tell people around if you'd like BAK and BAB, one mother admitted that her son saw an example of her brother who was able BAK and BAB to the toilet. Researchers also interviewed the mothers in Children's Playgroup different, discovered five children aged 30-36 months, 3 Mother says her son has been trained to alert her if you want to pee, one mother said every waking always bring their children to the bathroom, and one person's mother said her son has always been taught by him how to urinate into the bathroom.

Researchers also interviewed other mothers in Daycare Ketintang Surabaya, a mother says that has taught her toilet training to tell Mom if you want to pee, but often failed because his son always tells the mother after completion pee, especially if pipisnya on the carpet and on the sofa , sometimes unintentionally mother scolding her child. Unlike the other mother, in the same way to tell Mom if you want to pee first, making her often hold pipisnya, because the mother claimed her son was always scared and crying when taken pee into the toilet. One mother said that her son again if the home was able to pee into the toilet, but if it is deposited in a Child Care, children always pee in my pants, and eventually had to use diapers.

Efforts to train children in the urination and defecation can be done by providing examples and children imitate correctly, observe when giving examples of toilet training, giving praise when children are successful and do not scold when children fail in doing toilet training (Gupte, 2004). Bandura mentions that learning through observation can occur simply by watching the model alone and in with the observation that a child can learn to behave. Kids may not immediately provide a response (behavior) that is directly observable, but the child store what observed in the form of cognitive (cognitive form). This cognitive shape remains active in the child and when the child is in a similar situation or conditions, spontaneously form cognitive earlier participated determine the child's behavior in

these conditions. Behavioral models that have been observed children through TV shows, video movies, pictures, and video games can be a form of cognitive material child.

The cognitive behavioral model form into a subconscious reference material, which, if the child meets with a similar situation in the future will respond as he has seen how the model responds (Alwisol, 2004). Research conducted Ken and Cruskelly (2007) in the Toilet training for children with autism: the effects of video modeling show that the model can improve the achievement BAK video during the day among children with autism. BAK in toilet frequency greater for autistic children who watched the video of toilet training than children who do not menonton. Penelitian also mention children with autism who were given instructions on the direction of picture cards to go to the toilet, increased frequency of urinating in the toilet. Research conducted Salimah (2011) with the title of the impact of the play with the media image series in developing speaking skills and vocabulary early childhood affect the speaking skills and vocabulary children than to play without using the media image of the series, this is indicated in the increased number of vocabulary the word used in speaking. Based on the above phenomenon researchers are interested to know whether No "Effect of psychoeducation toilet training through demonstration video and a picture card of the mother's knowledge and ability toddler toilet training in children."

THE PROBLEM AND RESEARCH METHOD

Muscari (2005) states that there should be children aged 18-24 months of age or period of pre ekolah should have earned the implementation of toilet training by his parents, but the fact that researchers can sakitar environment researchers and interviews with some of the mothers who leave their children in place daycare in Surabaya, there are still many available toilet training problems faced by older people. For example, with a flurry of parents, so parents do not have the time to teach children about toilet training. Generally, children are entrusted in Daycare and Preschool aged 18-36 months are still using diapers.

Impact of toilet training is not directly perceived by the child but the result will disrupt development of the child as an adult later. Children will be rentetif where children tend to be stubborn and even miserly, things in the case if the parents often scold the child in the bladder and bowel, otherwise if parents are too casual leave rules in toilet training, the child will experience the personality of expressive where more children have the heart, tend to be careless, like stirring up trouble, emotional, and arbitrarily in performing daily activities. But there are also children who have been successful in toilet training because of the influence of the model of his brother. Therefore, researchers are interested in examining how the influence of psychoeducation toilet training through demonstration video and picture cards to increase the mother's knowledge and ability toddler toilet training in children?

The number of samples in this study was a population of as many as 30 people, all of whom enroll in classes / groups A1 and A2. Then the sample was divided into two groups of 15 people each. A1 group was given the intervention of so-called treatment group, then the next kelompok referred to as the control group. The group division is based on a procedure matching (match), by dividing into two equal groups, equalizes the number of samples between the treatment group and the control group.

As a means of collecting data in this study are: 1. Knowledge Capital Measurement Scale; 2. Sheet Observation Checklist Toilet training ability Children; 3. Elimination Schedule Sheets (BAK and BAB) for 24 hours. While data analysis, using statistical test of Wilcoxon Signed Rank Test (paired sample comparison test 2) and Mann Whitney U with a significance level of $p < 0.05$.

RESULT

Knowledge Mother and Ability Son before Awarded psychoeducation Toilet Training in the Treatment Group and Control Group

Results of analysis table 1: it was found that by Mann Whitney test values obtained $z = -1.829$, with $p = 0.067$, where $p > 0.05$, which means there is no difference in the value of knowledge of mothers before being given psychoeducation about Toilet training between the treatment group and the group

control. As for the child's ability in doing toilet training, based on those values obtained Mann Whitney $z = -0.215$, with $p = 0.829$ where $p > 0.05$, which means there is no significant difference between the abilities of children in the treatment group and the control group in conducting toilet training before being given psychoeducation.

The Effect of psychoeducation on Toilet Training with demonstrations through Video and Picture Cards to the Knowledge Capital

Based on the above comparison table 2 of knowledge of mothers before and after giving psychoeducation intervention in the form of toilet training with demonstrations through video and picture cards increased maternal knowledge about toilet training. It can be seen from the Wilcoxon Signed Rank Test with significant value of $p = 0.001$ where $p < 0.05$, which means there are significant differences after a given psycho-education, which means that H_0 refused. Thus there is the effect of psychoeducation with demonstrations through video and picture cards to increased knowledge of the mother. The results mean that the original 46.27 (pre) menigkat be 78.07 (post), indicating quantitatively that the mother's knowledge increased after a given intervention. Statistical test with Mann-Whitney U Test showed that significant values (p) = 0.000, which means the knowledge of mothers who received psychoeducation through demonstration video and picture cards completely different from the control group who did not receive psychoeducation, although quantitatively there are changes (in column the middle of the average of 51.93 into 53.40), but the change is very little / no means. In addition the results mean = 78.07 (post) in the treatment group was higher than the control group (53.40) shows quantitatively the increase pengetahuan.pada treatment groups.

Effect of psychoeducation on Toilet Training with demonstrations through video and the ability Children's Picture Cards Carry Toilet Training

Based on the comparison table 4.1.5 in the ability of children before and after giving psychoeducation intervention in the form of toilet training with demonstrations through Table 1. Knowledge Mother and Ability Son before Awarded psychoeducation Toilet Training in the Treatment Group and Control Group

video and picture cards increased children's ability to carry out toilet training. It can be seen from the Wilcoxon Signed Rank Test with significant value of $p = 0.001$ where $p < 0.05$, which means there are significant differences after a given psycho-education, which means that H_0 refused. Thus there is the effect of psychoeducation with demonstrations through video and picture cards to increase children's ability to carry out toilet training.

The results mean that the original 11.33 (pre) menigkat be 14.80 (post), indicating quantitatively that toilet training the child's ability to implement given increased after the intervention. Statistical test with Mann-Whitney U Test showed that the significant value of $p = 0.000$, which means the ability of children receiving psycho-education through demonstration video and picture cards completely different from the control group who did not receive psychoeducation, although quantitatively there is a change (in the column middle of the average of 11.47 to 11.80), but the change is very little / no means. In addition the results mean = 14.80 (post) in the treatment group was higher than the average in the control group (11.80), it indicates quantitatively the increase a child's ability. carry toilet training in the treatment group.

Effect of psychoeducation Toilet Training with demonstrations through video and picture cards to Capital Knowledge and Ability to Implement Toilet Training Children in Children Toddler

Base on Table 4. by Mann-Whitney U Test showed that the significant value of $p = 0.000$ both the variable mother's knowledge and abilities of children in after given psychoeducation, where $p < 0.005$, meaning that either the mother's knowledge and the ability of children who received psychoeducation through demonstration video and picture cards really no significant difference with the control group that did not get psychoeducation, so H_0 rejected. It can be concluded that: there is the effect of psychoeducation about toilet training to the knowledge of the mother and the child's ability in executing toddler toilet training.

Variable	Mean	SD	Z	P (2-tailed)	Makna
Mothers Knowledge (Y1)	49,10	7,984	-1,829	0,067	> 0,05 T'ada beda
Ability Toddler (Y2)	11,40	1,102	-0,215	0,829	> 0,05 T'ada beda

Table 2. Comparison of knowledge of mothers before and after giving psychoeducation in the treatment group and the control group.

	Intervension group		Control		Intervension group		Control	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Mean	46,27	78,07	51,93	53,40	78,07	53,40	78,07	53,40
SD	7,478	2,712	7,675	8,007	2,712	8,007	2,712	8,007
	p = 0,001 z = -3,410		p = 0,011 z = -2,555		p = 0,000 z = -4,681			
	<i>Wilcoxon Signed Rank Test</i>		<i>Wilcoxon Signed Rank Test</i>		<i>Mann-Whitney U Test</i>			

Table 3. Comparison of the ability of children before and after giving psychoeducation in the treatment group and the control group.

	Intervension group		Control		Intervension group		Control	
	Pre	Post	Pre	Post	Post	Post	Post	Post
Mean	11,33	14,80	11,47	11,80	14,80	11,80	14,80	11,80
SD	1,234	0,941	0,990	1,014	0,941	1,014	0,941	1,014
	p = 0,001 z = -3,430		p = 0,25 z = -2,236		p = 0,000 z = -4,543			
	<i>Wilcoxon Signed Rank Test</i>		<i>Wilcoxon Signed Rank Test</i>		<i>Mann-Whitney U Test</i>			

Table 4. Comparison before and after giving psycho-education, both in knowledge of the mother and the child's ability in executing toilet training

Intervensi	Kelompok	Variabel	Z	P	Makna
Sebelum	Perlakuan & Kontrol	Pengetahuan Ibu	-1,829	0,067	> 0,05 T'ada beda
		Kemampuan Anak	-0,215	0,829	> 0,05 T'ada beda
Sesudah	Perlakuan	Pengetahuan Ibu	-3,410	0,001	< 0,05 Ada Beda
		Kemampuan Anak	-3,430	0,001	< 0,05 Ada Beda
	Perlakuan & Kontrol	Pengetahuan Ibu	-4,681	0,000	< 0,05 Ada Beda
		Kemampuan Anak	-4,543	0,000	< 0,05 Ada Beda

DISCUSSION

After analysis, the meaning of the section of this discussion will be reviewed on the effect of psychoeducation with demonstrations through video and picture card to the mother's knowledge about toilet training and the ability toddler toilet training in children before and after the intervention. Knowledge Of the mother about Toilet Training 4.1.4 Analysis of the data in the table shows that the ratio of knowledge of mothers before and after giving psychoeducation intervention in the form of toilet training with

demonstrations through video and picture cards increased maternal knowledge about toilet training. It can be seen from the Wilcoxon Signed Rank Test with significant value of $p = 0.001$ where $p < 0.05$, which means there are significant differences after a given psychoeducation, thus there is the effect of psychoeducation with demonstrations through video and picture card to the mother's knowledge. The results mean that the original 46.27 (pre) meningkat be 78.07 (post), indicating quantitatively that the mother's knowledge increased after a given intervention. It is influenced by:

Their provision of information from the outside through a process of learning / psychoeducation using the demonstration through video and picture cards also provide leaflets. Psychoeducation is given in the classical and individual, as an evaluation of the success of the provision of psycho-education materials with a lecture and question and answer researchers also repeated demonstrations by the respondent. The demonstration was done with the hope that the mother / respondent is not simply knowing and understanding the material toilet training, but also capable of practicing orally, as a model for their children during home, even able to practice using the tools if need.

The education level of the mother, hopes the higher the mother's education level, the more easy to master the material, but in this study the majority of recent education mother / respondent is SMP (47%) and high school (40%) and only 13% have the latest educational academy / College. Therefore, the provision of interventions in this study made it interesting not just ceramah, frequently asked questions and the distribution of leaflets, but also accompanied by method-meode other support such as video, picture cards, so expect material psychoeducation can be understood and absorbed optimally (Notoatmodjo 2007). Basic education junior high school which, according Notoadmojo (2007) is a secondary education does not necessarily make a person unable to optimally capture the material but by using certain strategies or teaching methods, in this case using the demonstration method of learning materials may be arrested in opimal. This is consistent with that put forward Muchtar (2005) that learning dem onstrasi method can be used to achieve the purpose of psychomotor for primary and secondary education levels.

Memory, interests and concerns also affect the increase of knowledge (Nursalam, 2005), as well as interest / enthusiasm of respondents to toilet training materials. Originally mothers / respondents underestimate the benefits of toilet training, but after knowing the positive and negative impacts, they became enthusiastic to continue the program's toilet training, so that the developmental tasks of their children can be resolved completely. Many of those who did not think that the stages of toilet training skills such details. Psychoeducation This gives an

opportunity to the parents of children toddler to better understand the developmental tasks that must be achieved in children toddler in this case is toilet training, so that parents can early identify the readiness of the child in toilet training and find solutions to problems that may arise due toddler toilet training in children. Noteworthy during the intervention process is the procedure / stage practice of toilet training in children toddler which was the most important part of learning, it is in maksdukan to avoid experiences that are less convenient both for parents and for children whose effects may occur in the future. Practice correct at the time of the child's toddler toddler toilet will reduce fears of the parents so that children get the ability toilet training in accordance with the development tasks

Ability Toilet Training in Toddler

Based on the comparison table 3 in the ability of children before and after giving psychoeducation intervention in the form of toilet training with demonstrations through video and picture cards increased children's ability to carry out toilet training. It can be seen from the Wilcoxon Signed Rank Test with significant value of $p = 0.001$ where $p < 0.05$, which means there are significant differences after a given psychoeducation, thus there is the effect of psychoeducation with demonstrations through video and picture cards to increase a child's ability carry toilet training.

The results mean that the original 11.33 (pre) meningkat be 14.80 (post), indicating quantitatively that toilet training the child's ability to implement given increased after the intervention. Statistical test with Mann-Whitney U Test showed that the significant value of $p = 0.000$, which means the ability of children receiving psycho-education through demonstration video and picture cards completely different from the control group who did not receive psychoeducation. It influenced several factors, among others:

- a. Sex of the child, where the majority of the sex of the child / respondents were female (67%),

Results of previous studies confirms that the boys did start and mastering toilet training much longer compared to girls. This difference may be caused by several factors: (Gilbert, in Eka, 2008):

- 1) The nervous system of a boy growing longer
 - 2) Tad less sensitive to the taste of their skin wet
 - 3) Children of women may gain the ability to toilet training earlier caused them express a need words, this is an adaptation of the self-limiting mechanism. It also makes it easier to adapt daughter emotionally with their parents so that the response in conducting toilet training children is better. In addition, it may be another consideration is the son neurological maturity limits how quickly they can gain control of the bladder.
 - 4) The main coach toilet training is done by the mother (a woman). It can make a complicated experience for the boys. According to Erikson's theory of psychosocial development, children will imitate the behavior of others around them to develop their autonomous function in controlling the body and the environment through the learning process. This makes the toddler age children were more likely to have the nature of imitation, so he needs to figure that really fit to exercise it. In fact, toilet training between men and women differ in terms of the way bladder / bowel and hygiene proper way.
- b. Children who are elected in accordance with the criteria for inclusion are toddler children who do not have mental and physical disabilities, so as to facilitate the identification of the child's readiness.
 - c. The ability of children optimally will get when there is a positive interaction between parents, especially mothers and children. As stated by Stanley (2011, in Hardy; journal of the Faculty of Medicine) that forcing a child to get early toilet training capability will advance in the identification of readiness.

Further Hardy (2011) explains that the children were accompanied by their parents optimally be more successful than their achievement of toilet training was unaccompanied. Therefore, the author establishes a mother who does not work as the criteria for inclusion in this study, given that the limitations in this study were relatively short-term monitoring pre-his post just one

week, with the expectation that mothers who do not work can carry out fully the role of the mother as a parent , escorts and models in the practice of toilet training during the intervention process underway (Senjaputri, Journal of Medicine, 2012).

The role of mother as parents are watching to monitor the physical and mental readiness of a child to make a schedule for the elimination of BAK / BAB child for 24 hours. The role of mother as a companion and a model in the practice of toilet training that showed the correct place for BAK / BAB correct, accompanying the child when it refused tub / defecate in the toilet so the children feel safe and comfortable, as well as being a model for children, how to teach the child to communicate if the sensation BAK / BAB started dirasaka, taught to sit or squat on the toilet, teach you how to install the bearing / safety devices potty training, teaching how to clean up the feces and genital organs independently, teaches removing and wearing independently (Senjaputri, 2012)

d. Age, According to Wong (in Supartini 2009) most children will have the ability to toilet training in the second year. At this stage, children will imitate the behavior of others in the vicinity and it is a learning process for children.

Age in achieving optimal ability toilet training is between 24-36 months. This is because at this age children's language development, both verbal and non-verbal been able to communicate their needs in bereliminasi. Besides the motor development of children at this age also shows the development of a more mature so that it can support the upgrading of toilet training. In a previous study James (2010, in Syafitri: Undip medical journal) stated that: things that affect the ability to toilet training in children between the toddler with another child's age and readiness. In addition to the parents should prepare themselves, parents also need to pay attention to signs of readiness that covers children's mental readiness, physical, psychological. The use of demonstration methods can be used for normal children but not necessarily be used for children with special needs (physically and mentally), so the need to find the right method that can be used both for normal children and children with special needs (physical disabilities and mental).

In this research, psychoeducation with the method of demonstration is not only given to the respondent's mother, intervention followed the young respondents to the method demonstration through video and a picture card for 3 days in a row because the final goal of the success of the provision of psychoeducation is a child who will carry out the stages of skill toilet training. Told stages of skill, since the implementation of the toilet training for children is not only limited aspects of knowledge / cognition alone but should be able to perform these skills.

From the analysis of this study showed that the original average 11.33 (pre) meningkat be 14.80 (post), indicating quantitatively that toilet training the child's ability to implement given increased after the intervention. Quantitatively, these changes are not so great, that means 8 stages of toilet training a child's ability to target psychoeducation in this study can be said to be completed, and this becomes a limitation of the study. The eight stages of the child's abilities are:

- 1) Sit / squat on the toilet / wc without fussing, crying, or suddenly go
- 2) Communicate verbal / non verbal sensations BAK / BAB
- 3) Request to the toilet or directly go to the toilet
- 4) Remove your pants before going to the toilet
- 5) Clean the genital independently
- 6) Flushing the urine / feces
- 7) Wearing independently
- 8) Washing hands with soap

8 stages of the last three capabilities unresolved during the intervention process takes place, especially in the treatment group, namely; ability no 5, 3 and 1 and. This can be caused by:

- a. Limitations of the lag time between pre-post intervention (for 1 week)
- b. On the ability of five (cleaning genitals independently), based on interviews with the mother / respondent, that they still have not given credence entirely to her children to clean genital independently. In addition to the respondent (kids), some of them perceive the stool was dirty, smelly and disgusting, so there are those who refuse to clean independently
- c. The ability of 1 and 3 (Sit / squat on the toilet / wc without fussing, crying, or

suddenly go and ask for toilet or directly go to the toilet) based on interviews with the respondent (mother and child) still have concerns afraid of falling or slipping.

CONCLUSION

Psychoeducation about toilet training with a demonstration video and a picture card is quite effective as a learning method in changing the behavior of parents, especially mothers in the aspect of knowledge and psychomotor. This is due mainly audio-visual demonstration (video and picture cards) can stimulate cognition someone whose origins are not knowing to knowing or understanding. Psychoeducation about toilet training with demonstrsi video and picture cards are also quite effective in stimulating improve the ability of native children who can not afford to implement it.

For the implementation of the intervention (pause pre-post) should be no distance enough time / not too short so the 8 stages of toilet training skills can be achieved with a thorough. The video content and a picture card infrastructure should be adapted to the respondent (eg squat wc pictures, etc.). Need to develop programs toilet training as a requirement in school kindergarten.. Need to develop procedures toilet training for children with disabilities or special needs.

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RELATIONSHIP BETWEEN GENETIC FACTORS, PARENTS' ROLE AND RECURRENCE OF ALLERGY IN CHILDREN AT THE JEMURSARI ISLAMIC HOSPITAL SURABAYA

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ABSTRACT

Introduction: Children with allergic diseases is increasing. Genetic factor and parents' role are important in dealing with allergies in children. The aim of the study is to determine the relationship between genetic factor, parents' role, and recurrence of allergy in children at Jemursari Islamic Hospital Surabaya. **Method :** The study design was analytic cross sectional. The population and sample were all mothers who had 1-5 years allergic children based on the sample criteria and used consecutive sampling. The independent variable was genetic factor, parent role, the dependent variable was recurrence of allergy. The instrument was questionnaires. Data analysis used chi-square test. **Result :** The result showed the majority (73,3%) had genetic alergic factor, (63.3 %) parents role was not good , the majority (56.7 %) of the children experienced a severe allergy recurrence. Fisher 's Exact Test $\rho = 0.242$ meant that $\rho \geq \alpha = 0.05$ means that H_0 was accepted , there was't a relationship between genetic factor and allergic recurrence, Fisher 's Exact Test result showed that $\rho = 0.023$ meant that $\rho < \alpha = 0.05$ so H_0 was rejected, there was a relationship between the parents' role and recurrence of allergies. **Discussion :** It concluded that alergic genetic factor would not affect to recurrence and less of parents' role made allergy recurrence get worse. Parents are expected to have the better role in order that the recurrence is rare.

Keywords : allergy ,genetic factor, parents role , allergy recurrence

INTRODUCTION

Allergy is a disease caused by genetic factors and environmental factors. Allergy is a typical form of the disease is the result of the interaction of a distorted body defense system because of genetic factors and environmental factors (Setiabudi and Hardywinito, 2003). Pollution of air, land and water that will give rise to various allergens or allergen substances are some examples of environmental factors that can affect the onset of allergies (Maharani Sabrina, 2008).

Children up to adults can be exposed to the disease. Allergies occur unexpectedly, came and went quickly, and may also occur or persist in quite a long time, so it can be said of this mysterious disease allergic (Graha, C.K. 2010). The signs and symptoms caused by allergic diseases at children it's like spotting a redness on the cheeks accompanied by flaking skin as well as skin scales. In addition, it can also happen to the symptoms of the cough that

occurs repeatedly, it appears there is shortness of breath, an extra breath sounds (Setiabudi and Hardywinoto, 2003).

About one in three babies born now have an increased risk of allergy (Graha, c. k., 2010). Toddlers also has the risk of allergy. Parents do not know that there will be impacts arising from allergic history parents at her child that is impacting to children developpment, harm the body, triggering the onset of complications of the disease, and can be life-threatening (Graha, c. K 2010). Some parents who have a child allergies often seen desperate because the disease often relapse and recurrence (Judarwanto, Widodo 2012). Based on data of the World Allergy Organization (WAO) number incidence of allergy in 2011 continued to increase by 30-40% of the population in the world.

According to the Center for Disease Control and Prevention (CDC) States that the occurrence of allergies increases to 3 fold that

counted since 1993 to 2006. In Indonesia, according to the newspaper, the *sindo* may 8th, 2013, estimates the number of occurrence of allergies achieve up to 30% per year.

Allergy is a typical form of the disease is the result of the interaction of a distorted body defense system because of genetic factors and environmental factors (Setiabudi and Hardywinito, 2003). Parents don't realize that this lineage or genetic factors can be the cause of the onset of the disease. Parents berpendapati lingkunganlah factors that can effect such as air. Older people who suffer from allergies can be passed down to his son, if there is a mutation in the genes of the child from his parents then allergy can occur or have allergies. This gene mutation is inevitable because it occurs when the conception of the child. The role of the parents can do to minimize the occurrence of allergies in children is by knowing the right information about handling against allergies. In addition, parents can play a role in maintaining the environment of such children, food, the environment, and the cleanliness of the House that greatly influences the incidence of allergies in children against (Graha, c. K 2010).

Allergies can not be removed, but can be minimised kekambuhannya. To minimize recurrence of allergy in the child, the role of parents is needed such as avoiding allergy factor. The ideal step is avoiding the originator can cause the allergy complaints. Knowing early on that the child affected by allergies allergy test way so early prevention can be done for those who already have a history of allergies.

Based on the description above, then the writer wanted to know the relationship between genetic factor, the role of a parent , with recurrence of allergy in children at Jemursari Islamic Hospital Surabaya .

RESEARCH METHODS

The design of the study was analytic with Cross Sectional approach. Population and sample was all mother and child allergies that are not undergoing immunotherapy and taken care of by the parents as well as experienced a recurrence of allergy who came to children's at Jemursari Islamic Hospital Surabaya 2015. The sampling technique is the consecutive

sampling. variables independent are genetic factors and the role of parents Variabel dependent is a recurrence of allergy. Instrument in the research are: for variable genetic factors and recurrence using questionnaire and ensured with medical record data, the variable for the role of parents as guardian by using questionnaires sheet of 12 questions covered in the form of a check list. Data analysis using SPSS by chi Square test.

RESULTS

a. Characteristics of respondents based on genetic factors in family

No	Genetic factor	Frequency (f)	Percentage (%)
1	There are	22	73,3
2	None	8	26,7
Total		30	100

b. Characteristics of the respondent based on the role of parents.

No	Role of parent	Frequency (f)	Percentage (%)
1	Good role	11	36,7
2	Less role	19	63,3
Total		30	100

c. Characteristics of the respondents based on recurrence of allergy.

No	Relapse	Frequency(f)	Percentage(%)
1	Mild relapse	13	43,3
2	Severe relapse	17	56,7
Jumlah		30	100

d. Cross-Tabulations genetic factors with recurrence of allergy

No	Genetic factor	Recurrence of allergy				Jumlah	
		Mild relapse		Severe relapse		N	%
		N	%	N	%		
1	There is	8	26,7	14	73,3	22	100
2	None	5	73,7	3	26,3	8	100
Jumlah		13	40,0	17	60,0	30	100

Fisher's Exact Test $\rho = 0,242$

Fisher's Exact Test in test get $\rho = 0.242$ means $\alpha = 0.05 \geq \rho$, that means there is not a relationship between genetic factors with

recurrence of allergy in children at Jemursari Islamic Hospital Surabaya .

e. Cross-Tabulate the role of parents with recurrence of allergy

No	Role of Parent	Kekambuhan Alergi			
		Mild relapse		Severe relapse	
		N	%	N	%
1	Good role	8	72,7	3	26,3
2	Less role	5	26,3	14	73,7
	Jumlah	13	40,0	17	60,0

Fisher's Exact Test $\rho = 0,037$

Fisher's Exact Test in test get $\rho = 0.023$ means $\alpha = 0.05 < \rho$, that means there is a connection between the role of a parent with recurrence of allergy in children at Jemursari Islamic Hospital Surabaya .

DISCUSSION

1. Genetic factors

The above results suggest that the occurrence of genetic factors or history of allergy in children most 22 (73,3%) due to inheritance of family allergy history especially from parents. The results of the above research supported by research suggesting that families that show allergy symptoms obtained data that when both parents suffer from allergies then chances are its descendants will inherit the allergy to 75%. But if only one of the parents who suffer from allergies, found that only 50% of the offspring will suffer allergies (Setiabudi dan Hardywinito, 2003).

It is also supported by Purnomo (2008) that a family history of effect on the incidence and recurrence of a disease.

Supported also by research Dold, dkk 3 stated that atopy parents determine the magnitude of the risk of her child to suffer the same allergic diseases. Researchers also mention that the prevalence of asthma in children who do not have a history of allergies in both parents amounted to 6%, whereas in children who have a history of allergies in both his parents obtained an increase more than doubled or amounting to 16%. Cohort study shows that when one of your parents have allergies,

chances are his son to suffer allergies by 33%. When both parents have allergies, chances are his son to suffer allergies of 70% .4

2. The role of the Parents

Based on the results above, most of the parents of 19 (63.3%) have a less role. The less role of parents supported by (63,4%) parents stated does not agree to understand the correct factor – what are the factors that can cause allergy at anakny, a parent does not agree to protect his son from the recurrence of allergy by way of avoid the cause, disagree do the observations made a day today against all the things that can affect the recurrence of Allergy and parents also do not agree do an allergy test. Most of the parents (56.7%) opinion that did not agree to postpone the awarding of some foods cause allergies such as chicken, fish, and eggs, and also replace the formula with soya and also did not agree to avoid precipitating factors because they assumed that the allergy occurs in children disappears as you get on with the child. Parents assume that the older the age of her child, then the child's body on durability will also be getting better. So the recurrence of allergy in children will also be increasingly rare. Theoretically, allergies indeed could not be eliminated, but it can be dijangkan kekambuhannya frequency Therefore, parents must provide the handling of allergies in children appropriately.

The role of less well above contradict opinions according to Chairinnisa K Graha (2010), parents are very important to help tackle the problem of allergies in children, not only call the doctor, but also need the right knowledge and information in dealing with the problem of allergies children his life day by day.

3. Recurrence of allergy

Children mostly 17 (56.7%) have severe relapse. Children 53,3% experience a recurrence of allergy with frequency ≥ 1 x/month. Average 2 x/month relapse. most recurrences four times per month

According to Setyanto, 2014 children exposed allergies once a month or once month two times it is unnatural and can endanger the life of a child at a later date.

Second, majority 53,3% children who come to the children's hospital was having a recurrence of allergy by showing symptoms that are more severe than visits before. children suffering from allergies will exhibit early symptoms diarrhea, then the child will come back to hospital with severe relapse like

bloody diarrhea, so that these children will need further treatment in hospitals. In addition to diarrhea, usually also showed symptoms of cough and influenza

4. The relationship between genetic factors With Recurrence of allergies .

Chi Square analysis obtained $p = 0.242$ $\alpha = p$ mean < 0.05 . This means that there is no relationship between the history of allergy to the degree of recurrence of allergy in children. Parent who have allergies in theory also lowered the genetic allergy on her children but does not affect the rate of recurrence. The results of this study in accordance with research of Purnomo (2008) stating that a history of asthma have a meaningful relationship with p value = 0,015. Has been widely proven by many researchers that when both parents suffer from allergic diseases, 60% of her children will suffer from allergic diseases, Asthma, rhinitis, both dermatitis atopi or other allergies.

This means that there are other factors that cause recurrence in accordance with the results of the research Syaiful, 2012 about allergic disease Association with genetic and environmental factors. Based on the results of this research found data that house dust (p value = 0,018), genetic (p value = 0.042), order of birth first/eldest son (p value = 0.232; Or potentially 4.55) to experience the clinical manifestations of asthma. So, it can be concluded that there are a lot of factors precipitating causes of recurrence of asthma, not only genetic but can also be obtained from the environment inside and outside the House.

5. The relationship between the role of a parent with Allergies in children of recurrence The results of the Fisher's Exact $p = 0.023$ mean $\alpha = 0.05 <$., meaning that there is a connection between the role of a parent with allergies in children of recurrence. 19 parents who have less role mostly 14 (73,3%) his children suffered a recurrence of severe allergies.

The better the role of parents as the protector in avoiding the allergen also increasingly lighter incident recurrence of allergy that plagued her children. This is in accordance with the opinion of the Chairinnisa K Graha (2010) which revealed that parents are instrumental to help tackle the problem of allergies in children. A pretty dangerous complications can arise if the allergy is not handled properly. A trivial oversight from

parents regarding allergies, turned out to be long-duration can also interfere children development e , harm the body, triggering the onset of complications of the disease, and can be life-threatening. Therefore it is highly recommended on the parents to do the Allergy prevention as early as possible to reduce the impact on the lives of the children at a later date.

However, handling is too loose or excessively on allergies is also not good. If it is too loose, the children will continue to suffer from various disorders. Likewise sebaliknya, handling allergy overload will limit food consumption so that the child can interfere with the growing important role. Avoid foods or the originator of the allergy by right and not dabble is the only way a parent can do to overcome the allergies in children. Some parents deliberately giving food allergy Starter to his son with the hope that the body of the child the more lenient and not allergic anymore. This way can backfire for the child because of allergies that could trigger dangerous (Permanasari, Indira 2014).

Munazir (2011), says parents have an important role in Allergy prevention efforts as early as possible in order to reduce the impact on the impact on children's lives in the future. Signs and symptoms of allergy's own and in whatever form constitutes the beginning of the disease, thus preventing allergies as early as possible to prevent future allergic disorders (Judarwanto, Widodo 2012). Support from parents is very needed when children experience a recurrence of allergy. Parents should be able to menyikapinya well. Parents should just be assertive to prohibition of food or other things that can trigger a recurrence of allergy. However, children should not be made the object of anger when a child violates the restrictions. Scold a child when alerginya relapse makes children feel depressed and triggers the onset of depression. Therefore the role of the parents determine the durability and stability of the emotions his son (Hanimah, Fatimah 2013)

CONCLUSION AND REKOMENDATION

Children at pediatrics Islamic hospital Surabaya most have allergy genetic factors in his family, the children experienced a severe allergy recurrence twice per month ,

allergic genetic factor would not affect to recurrence and less of parents' role made allergy recurrence get worse. Parents are expected to have the better role in order that the recurrence is rare

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EDUCATION, INTENSITY OF MOTHER'S PERCEPTION SENSORY STIMULATION WITH LANGUAGE DEVELOPMENT OF CHILDREN

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ABSTRACT

Introduction: Stimulation is an important factor in the children's growth and development. According to NHCS-National Center for Health Statistics (2000) in United States, 3.29% of children which is less than 5 years old still have the language development delay. Therefore, the purpose of this study is to analyze the corcorrelation between the education and the intensity of perception sensory stimulation given by the carers and the language development speed of children whose age is 9 – 12 months in integrated health post of Durung Bedug Baru, Sidoarjo (Integrated Health Post). **Method:** The design of the study used was a correlative analytic with *cross sectional*. The population involved 40 mothers and their children's age was 9 – 12 months. 36 respondents were chosen as the samples by using simple random sampling technique. Questionnaires and DDST (Denver Development Screening Test) were used to collect the data which were then analyzed by using Spearman's Rank statistic test. Moreover, based on the statistic test, the result showed that $\rho = 0.00 < \alpha = 0.05$ so that H_0 was rejected, it described that there was a corcorrelation between the mother's education and the language development, and $\rho = 0.011$ meant that $p < \alpha = 0.05$. **Result:** H_0 was rejected, it described that there was a corcorrelation between the intensity of carer's perception sensory stimulation and the language development speed of children whose aged were 9 – 12 months. **Discussion:** Low education and lack of giving intensity of perception sensory stimulation causes the children have an abnormal language development.

Keywords: Education, Perception Sensory, Language Development.

INTRODUCTION

Language skill is an indicator of the whole child development because language skill is sensitive to delay or damage on other systems. One of the causes of delay in the language development is the parents role or caregivers. When a child has a language delay, the child cannot understand and tend not to listen to the words. Problems often found in the community are why the child has a language delay due to the lack of mothers' intensity to stimulate their children, they assume that children will be able to speak for themselves without obtaining stimulation. According to Suyanto (2010) the cause of caregiver who gives less stimulation in

children because a lot of parents or caregivers who become career women, they are more interested in their career than in their children's speaking ability.

Another reason is because parents are tired after working all day taking care of the house and prefer to watching television or relaxing than stimulating their children. In the United States, 8-12% of preschool children have a variety of language barriers, and 10% of children who entered first grade have a speaking barrier, mild to severe (Suyatno. 2011). The number of children whose age was 4-6 years in Indonesia was around 12.6 million children, or approximately 7% of the 280 million of Indonesian population (Depkes RI, 2008).

Based on the report of Health Department, East Java in 2009 listed the numbers of achieving the early detection of growth and development toward children under five years and apras was 70.91% This indicated that the achievement of early detection of infants and apras growth and development was still far from the target set by the Health Department of East Java which is 80% of the children under five years, so if there were barriers to the development, particularly the language disorders in preschool children, it could not be detected. Based on this, it was estimated that the language delay in children is about 7-8%. In East Java, some reports mentioned that the language delay in children is 5-10% (Suyanto, 2010). While in Sidoarjo, the data showed children who had language delay in children was 15-20% on children under 3 years. From 5 children whose age was 9-12 months, there were 3 children who had the language delay.

When the speech delay in children under five years in Indonesia is more and more occurs and no attempt is made to resolve it, it is worried that cadre quality of the nation future as the development power will decrease and feared it will happen "communication gap" and there may also be what is referred to as "the lost of generation ". The most important task for the mothers is stimulating their children by reading numerous books, attending counseling conducted by health workers, especially nurses about the importance of stimulating a child early in order not to experience with language development delay.

RESEARCH METHOD

Type of design in this research was analytic because it tried to find and describe correlations between variables using cross sectional approach which this kind of research emphasized the measurement time or independent and dependent variables data observation only once at a time. The population in this study was mothers and children whose age was 9-12 months as 40 people with the large sample of 36 respondents. The sampling technique was simple random sampling, the data were collected by questionnaire and DDST sheets. Data were analyzed using *rank spearman* statistical tests. The independent variable was education and the intensity of perception

sensory stimulation, and the dependant variable was language development.

RESULTS

The result of special data which contained the characteristics of the respondent here was the correlation between education and language development and the stimulation intensity with parenting and language development.

a. Cross tabulation of maternal education with the language development

Table 1. Cross tabulation of mothers parenting and the language development

Mothers Parenting	Language Development			Total n (%)
	Normal (%)	Doubtful (%)	Abnormal (%)	
High	10 (50%)	8(40%)	2 (10%)	20
Low	1(6,25%)	2(12,5%)	13 (81,25%)	16 (100%)
Total	11 (30,6%)	11 (27,7%)	15 (41,66%)	36 (100%)

Table 5.8 above showed from 36 respondents, there were 20 children whose mothers' education was high, half of them (50%) had a normal language development, from 16 children whose mothers' education was low, almost half (41.66%) children had an abnormal language development. Based on *rank Spearman* statistical test by using SPSS acquired $p = 0.00 < \alpha = 0.05$, meant that H_0 was rejected, which meant that there was correlation between maternal education with language development in children whose age was 9-12 months in integrated health post of Durung Bedug Baru, Sidoarjo 2015.

Cross tabulation of sensory stimulation intensity perceived by mothers with language development.

Table 2 Frequency Distribution of cross-tabulation on the mother's perception sensory stimulation intensity with the language development of children whose age was 9-12 months in Integrated Health Postof Durung Bedug Baru, Sidoarjo 2015

The Intensity of perception sensory stimulation of caregiver	Language Development			Total n (%)
	Normal (%)	Doubtful (%)	Abnormal (%)	
Good	4 (100)	0 (0,0)	0 (0,0)	4 (100)
Adequate	3 (42,9)	2 (28,6)	2 (28,6)	7 (100)
Less	4 (16,0)	8 (32,0)	13 (52,0)	25 (100)
Total	11 (30,6)	10 (27,8)	15 (41,7)	36 (100)

Table 5.8 above showed that the case of the 36 respondents, there were four children who obtained the mother's perception sensory stimulation intensity entirely (100%) had a normal language development, from 7 children who obtained sufficient intensity of perception sensory by nearly half (42.9 %), they had a normal language development, and 25 children who had less mother's perception sensory stimulation intensity by nearly half (52%), they experienced an abnormal language development. Based on the statistical test rank Spearman test by using SPSS acquired $\rho = 0.011 < \alpha = 0.05$, meant that H_0 was rejected, which meant that there was a correlation between the intensity of mother's perception sensory stimulation and the language development speed in children whose age was 9-12 months in integrated health post of Durung Bedug Baru, Sidoarjo 2015.

DISCUSSION

Correlation between the development of language education and the education level of parents or caregivers also could affect by the language development of the caregiver to the child. From the result of *rank Spearman* statistical test, it was obtained that $\rho = 0.000 < \alpha = 0.05$, so it could be concluded that H_0 was refused and H_1 was accepted, which meant that there was a correlation between parents' education with the language

development in children whose age was 9-12 months in integrated health post of Durung Bedug Baru, Sidoarjo. The result showed that from 36 respondents, there were 20 children whose mothers' education was high, half (50%) of them had normal language development, from 16 children who obtained low maternal education almost half (41.66%) of them experienced an abnormal language development. From the result of the study towards 36 respondents, perception sensory of parental education is one of the factors that influence the language development, because with a good education, parents can receive all the information coming from the outside about good parenting. Mother who has high level of education tends to be more understand about how to take care of children compared with mothers who have low level of education, they are less understand how to provide a stimulus so that they pay less attention to the development, especially the language development. According to Soetjiningsih (2012), parental education is one of the important factors in the growth and development of the child, because with a good education, parents can receive any information from the outside, especially about how to stimulate their children's growth and development well, keeping their health, education, and etc. Therefore, education also affects their children's language development.

1. The correlation between the mother's intensity of perception sensory stimulation and their children's language development.. From the *rank spearman* statistical test result was obtained that $\rho = 0.011 < \alpha = 0.05$. It could be concluded that H_0 was refused and H_1 was accepted, which meant that there was a correlation between the intensity of perception sensory stimulation of caregivers with language development in children whose age was 9-12 months in Integrated Health Post of Durung Bedug Baru village, Sidoarjo. Based on the result of the study of the 36 respondents, there were four children who obtained the intensity of perception sensory stimulation from the mother entirely (100%) had a normal language development, then from 7 children who obtained enough intensity of perception sensory of caregivers almost half (42.9%) of them experienced normal language development, and 25 children who had less intensity of the perception sensory from the caregivers nearly half (52%) of them

experienced with an abnormal language development. If parents or caregivers provide less intensity of perception sensory stimulation will cause their children experience with the delay of language development, and therefore caregiver should be able to give the intensity of perception sensory stimulation to their children so that they will not experience an abnormal language development and can grow well in their environment. In accordance with the theory of Soetjningsih (2012) the intensity of stimulation is the most important thing in the children's growth and development. Children who obtained the intensity of the targeted and regular stimulation will be faster to develop rather than the children who do not get it. If parents or caregivers provide less intensity of perception sensory stimulation will cause the children to experience delay in the language development, and therefore, the caregiver should be able to give the intensity of perception sensory stimulation to their children so that children will not experience an abnormal language development and can grow well in their environment.

CONCLUSION AND REKOMENDATION

Conclusion
Based on research that has been conducted, it can be concluded as follows:

1. The majority of the children's mothers in the integrated Health Post of Durung Bedug Baru, Sidoarjo had a high level of education
2. The majority of the children in Durung Bedug Baru in the Integrated Health Post, Sidoarjo were less of the intensity of the perception sensory stimulation.
3. The majority of the children whose age was 9-12 months in the Integrated Health Post, Durung Bedug Baru village, Sidoarjo experienced with an abnormal language development.
4. There was a correlation of mother's education by caregiver with language development of the children whose age was 9-12 months in the Integrated Health Post, Durung Bedug Baru village, Sidoarjo.
5. There was a correlation between intensity of perception sensory stimulation by mothers with language development in children whose age was aged 9-12 months in the Integrated Health Post of Durung Bedug Baru, Sidoarjo.

Recomendation

Need for support and the role of health workers to provide counseling about the importance of giving perception sensory stimulation intensity perception of caregivers to children in order that the children do not experience with delay in language development and able to experience language development based on their age.

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ROLE ATTAINMENT COMPETENCY DEVELOPMENT STIMULATION WORKING MOTHERS HAD INFANTS 0-3 MONTHS

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ABSTRACT

Introduction: The role of a mother to do stimulation progress so that children reach developmental optimal¹. Achievement Roles or Role Attainment working mother can be either excitatory development of competence in delivering babies 0-3 months in the form of a process of self-development stimulation developments that will have an impact on infant development. The research aims to analysis role attainment of working mothers in the competence of stimulation developments that affect the development of infants. **Method:** The study design was analytic correlational with cross sectional approach. Population is working mothers had babies 0-3 months are 45 and by simple random sampling as many as 32. Collecting data using questionnaires for role Attainment competence development stimulation and observation sheet KPSP. Data were analyzed with the Mann Whitney statistical test. **Results:** Of the study 62.5% of respondents between 20-35 years old mother. 78.1% of respondents secondary maternal education. 68.8% of women work in factories. 78.8% of respondents position middle child and infant 56.3% 62.5% boy sex mom competent enough stimulation. 25% of infant development doubted. With Mann-Whitney statistic $r = 0.000$ for $r < \alpha$ sense there is a relationship role Attainment competence development stimulation and development. **Discussion:** Role Attainment stimulation competence development within the competence necessary stimulation for babies to develop optimally. Developmental delays in young infants by looking KPSP can still be achieved in the next month with early detection of growth and development conducted by health officials together with the mother to correct deviations in the development of the baby.

Keywords: role attainment, working mothers, development

INTRODUCTION

Child development is influenced by a variety of conditions, both from within the child and the condition of the surrounding environment, in order to achieve optimal development, the role of a mother to do stimulation progress so that children reach developmental optimal¹.

Child development is strongly influenced by social agents. The main thing in the process of social development is the family that parents and siblings². Kids as part of a family, in its development will not be separated from the environment to care for and nurture him. Where aspects of being monitored is (1) coarse or gross motor movement, (2) the motion is smooth or fine motor skills, (3) the ability of speech and language, and (4) dissemination and autonomy³.

Results of research conducted by Mochamad Fitriyono (2012) in the Kedung Jati Kabuh Jombang on the differences of language development in preschool children of working mothers and does not work

A woman although work should be able to exercise its role as mothers in providing child care and stimulation for the development of a working woman. therefore in stimulating the development must have the assurance that the mother is able to stimulate the development of the baby well. In an effort to evaluate the role of working mothers role attainment in stimulating the development of babies can be done through the role attainment mother based theory of Becoming a Mother. Role Attainment of working mothers in the interaction between mother and baby in the form of competence or the ability of the mother to provide activities to stimulate the development of infants 0-3 months in the form of a self-development process in the development stimulation activities can occur if the desire of the mother herself was not imposed or scared because the baby will experience a failure in development⁵.

In essence, a mother has primary responsibility, namely the household, including supervising and guiding their children. Due to

the increasing needs of the family, the mother is required to work to supplement their income. Thereby reducing the interaction of a mother for her child. Working mothers only have 8 hours of household work a day while the mothers who did not have time 16 hours in day⁵. Therefore, for mothers who have babies time factor also played a role in the stimulation.

Based on the above, the study aims to determine the role of working mothers in the competence attainment stimulation of the development of infant 0-3 months in the Sumobito Jombang 2015.

RESEARCH METHODS

Eksplanative observational research using cross sectional design to the final result is the analysis of the relationship between the independent variables competency development stimulation the mother worked, and the dependent variable is the development of infants The population of all working mothers who had infants as many as 45

samples were mostly mothers working mothers who have infants total of 32 samples. The inclusion criteria samples for maternal 1) Capital who delivered spontaneously attended by health personnel 2) Mother is working to leave her baby average 7-8 hours / day in the morning 3) The evenings are still feeding and taking care of the baby Exclusion criteria for the mother 1) my mother gave birth to sectio / with the aid of 2) She did not return to work after a leave . Inclusion criteria for babies: 1) Infants born to the baby desirable 2) Babies who are born do not have abnormalities congenital 3) Current research babies are healthy. Exclusion criteria are not sick for bayi 1) babies born after separating with her mother 2) Babies are not in a state hospital / never treated at the Hospital of sampling with simple random sampling location and time data : Sumobito Jombang November 2015 to January 2016. then be analyzed with the Mann whytney to determine the effect of mother competence in providing stimulation with baby's development

RESULT

1. Characteristics of respondents

Table 1 Characteristics of respondents by Age, education, occupation, position of the baby, the sex of the baby in the mother works

No	Characteristics	Category	Frequency	
			Σ	%
1	Age mother	< 20 years	2	6.25
		20-35 years	20	62.5
		> 35 years	10	31.25
2	Education	Low	3	9.4
		Secondary	25	78.1
		High	4	12.5
3	Occupation mother	factory workers	22	68.8
		Civil Servants	5	15.6
		store clerk	5	15.6
4	Position the baby	First	5	15.6
		Central	22	68.8
		Akhir	5	15.6
5	baby Gender	boy	18	56.3
		girl	14	43.7

Table 1 most of which 62.5% of respondents between 20-35 years old mother. The majority of respondents ie 78.1% mom secondary education. A large part of most of the 68.8% of women work in factories. 78.8% of respondents position largely middle child and infant sex 56.3% boy.

2. Role attainment competency development stimulation

Table 2 Table Role attainment competency development stimulation working mothers had infants in Sumobito Jombang 2015

Category	Frequency	
	Σ	%
Good	5	15.6
Enough	20	62.5
Less amount	7	21.9
	32	100

Table 2 the majority of 62.5% of mothers are competent enough stimulation.

3. The development of infants 0-3 months

Table 3 Table development of infants in Sumobito Jombang 2015

Category	Frequency	
	Σ	%
Adequate	22	68.8
Doubted deviation	8	25
	2	6.2
Amount	32	100

Table 3 almost half 25% of infant development Doubted.

4. The results of the analysis using the Mann Whitney

Table 4 Results of Mann Whitney

	<i>role attainment</i>
Mann-Whitney U	312.500
Wilcoxon W	778.500
Z	-6.655
Asymp Sig (2 tailed)	.000

The results of Mann-Whitney statistical test obtained significant numbers or probability value (0,000) of 0.05 or lower ($\rho < \alpha$), because $\rho < \alpha$, meaning there is a role attainment competency development and development of infants

DISCUSSION

1. Role Attainment of working mothers in the competence development stimulation Infants

Most maternal role attainment stimulation work quite in the competence development of more than 62.5%.

Role Attainment mother influenced the role of mothers, including the age at first birth, birth experiences, sex of the baby is born early separation with baby, social stress, personality traits, self-concept, attitude, health status, role conflict³.

In accordance with the results of the study were mostly mothers aged 20-35 years. The group of age 20-35 years is the reproductive age group. The group is the age group with a low risk gave birth to the baby because the reproductive organs of the group was ready to give birth. At that age group when the review of a group of labor is the productive age group in employment.

In accordance with the results of the research experience of childbirth in terms of position children born mostly working mothers giving birth in the middle of the child's position, namely 68.8%. At the position of the middle child's mother already had experience in stimulating development in children previous. Mother's experience is the most influential source of information. From past experience visible evidence of the mother can direct all his ability to succeed this time. Experience the success of stimulating growth in the past will make the mother have a good experience can be seen with her baby grow and development according to age.

Feedback on the work of someone who would positively enhance one's confidence. Failure in a variety of life experiences can be addressed with specific measures and can trigger self-efficacy perception for the better because it makes the individual is able to overcome obstacles more difficult later.

In accordance with the results of his half boy by 56%. Parents often have different views on the ability of men and women. There are differences in the development of the skills and competencies of boy and girl. When men strive for very proud of him, women are often at underestimate their capabilities. It is derived

from the views of parents towards their children. Parents assume that girl sare more difficult to follow the lesson than boy, even though their academic achievement is not too different. The more a girl receiving treatment streotipe this gender, the lower their assessment of her abilities. There is a culture in society that has the boy is a family own pride. The family does not already have a son will try to continue to have a boy..

In decision making daily life a mother will be faced with the choice of baby care and how a mother's work is determined by assessing the ability to stimulate the development of the baby. Mother 's would tend to avoid tasks and situations that be understood beyond the capabilities of self-mother otherwise mother will do the work that is considered able to work so that the mother can do stimulation with good ability in the stimulation of the development will determine how much work will be done the mother's to provide stimulation to babies in face obstacles and experience in the care that is not pleasant. When mother's are faced with difficulties in providing stimulate the development mother will try expend great efforts to overcome these difficulties. Mindset and emotional reactions of mothers during the interaction between the mother, the baby who will make the mother inspired in stimulating the development of the baby, the mother will be more focus and expend greater effort on the situation at hand, and every obstacle in the development stimulation..

How to overcome obstacles to growth stimulation can be done with professional guidance of personnel through health education. In line with this mother's ability development training necessary to enhance a woman's ability to achieve the role as mother⁹.

Role Attainment competence development stimulation can be formed through the experience of others. Mother's who saw or observed stimulation, which is done by others who managed to perform stimulation in infants can cause the overlying perception. The success of the stimulation of another mother can make to convince her mother that the mother is able to perform the same stimulation as mothers developments observed. Mothers also can ensure that he is able to perform the stimulation, like others who do stimulation. Role Attainment competence development

stimulation within the competence necessary stimulation for babies to develop optimally.

2. The development of infants a working mother

From the research there are still 31.2% doubted the baby and experiencing developmental disorders. Infant development indicators has not been reached on fine motor, gross motor, language and socialization.

Child health efforts made since the child is still in the womb to 1000 days of life pivotal period for subsequent developments aimed remedy maintaining the viability while improving the quality of life of children in order to achieve optimal growth and development of the physical, mental, emotional. Doing early stimulation to the baby adequate is an activity that stimulates the baby's brain that fine motor development, language and socialization development optimally according to age.

Basically every child will pass through the stages of the development process in accordance with his age. If a baby is in accordance with the features of the development of a certain age shall mean the baby managed to adjust to normal. One factor that affects the normal adjustment is competence in providing stimulation development³.

The development of the baby phase is the basis for development in subsequent phases. A baby is expected not progress much less dubious irregularities committed by KPSP³ assessment. The development of the doubts and deviations in language development and socialization will affect the development of intelligence functions. Movement of rigid, less coordinated, smooth movement, unresponsive to enveroment ².

3. Relations Role Attainment competence development stimulation of working mothers with development infant

Role Attainment competence development stimulation work associated with development of maternal infant infant with a value of 0.000. Role Attainment competence development stimulation is the ability of how to perform a coarse motion stimulation capability development, motor skills fine motor, speech and language and social skills and independence. In providing stimulation to the baby using the approach play. Playing is learning for babies. Play activities need not be

restricted only use the toy so your baby can learn to improvise with various toys. Play are important in the interaction of the mother and baby can enjoy the interaction fun and not have to use expensive toys.

Stimulation of the development of the baby is the basic ability to stimulate activity of children so that children develop optimally. Every child needs to get regular stimulation as early as possible and continuously at every opportunity. Stimulation stimulates the development of the basic abilities of children with stimulation of focus include coarse motion capability, the ability to fine motor movement, speech and language and socialization skills and Independence³.

Bonding attachment given first after the newborn with IMD for at least 60 minutes is an activity undertaken for the introduction of a baby with a mother's nipple and stimulating the baby sucking reflex. IMD can be performed on babies who have the temperament, gesture, appearance, characteristics, responsiveness, good health status. Baby factor that will either make the mother can reach Attainment role in the stimulation of growth and development competence with good¹⁰. A mother can give to the baby is breastfeeding well will make the mother feel proud and needed by the baby, their flavor is needed by all humans. Rooming or mother always stand beside the baby is a way for mother-baby attachment process occurs between the baby's skin and the skin of the mother, it affects the psychological development of the baby next. The warmth of the body is the mental stimulation needed by the baby. Babies who feel safe and comfortable sheltered a basis for the establishment of confidence in the future. Breastfeeding is satisfaction on the baby to stimulate the oral phase of psychosexual development in the baby feel satisfied by sucking the breast and unmet needs nutrition . Breastfeeding infants can not be replaced by others. This situation will facilitate the production of breastfeeding mothers because the mother's breast is often inhaled by infants are increasingly being inhaled by the baby milk production more smoothly, the mother will feel proud to be breastfeeding the baby and can care for her newborn.

The level of competence of mothers in stimulating the development of each other is not as dependent on their ability she had. The more the mother has competence in the

stimulation of the easier stimulation to the baby's mother, but it is also influenced by the condition of the baby.

Developmental delays in young infants by looking KPSP in infants can still be achieved in the next month with early detection of growth and development conducted by health officials together with the mother to correct deviations in the development of the baby.

CONCLUSIONS AND RECOMMENDATIONS

1. Conclusion

- a. lack of competence that will affect the achievement of the role of mothers in the baby's way of stimulating development.
- b. Stimulation of development in infants is an activity carried out by the mother as early as possible to stimulate the baby's basic capabilities.
- c. The development of stunted infants can still be achieved in the next month with early detection progress being made by health officials together with the mother.

2. Suggestions

- a. The development of health education means stimulation given to the mother to work through the class of pregnant women.
- b. Involve your husband or family in the stimulation of a baby's development

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PLAY THERAPY INFLUENCES AUTISTIC BEHAVIOR ON CHILDREN WITH AUTISM

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ABSTRACT

Introduction: Autistic has excessive behavior, deficient behavior, or no level behavior. Purpose the research is to identify the influence of play therapy to autistic behavior on children with autism. **Method:** This is a pre-experimental with one group pre-post test design. 15 Children with autism were conducted on this research and autistic behavior measure before and after given play therapy. **Result:** The result showed that before given play therapy, most of respondents (53%) are moderate, almost half of them (40%) are mild and some of them (7%) are severe on autistic behavior. After given it, most of respondents (53%) are mild and the others (47%) are moderate. Based on Paired T test result ($\alpha=0,05$), autistic behavior on Pre and Post play therapy has showed significant value 0,000. **Discussion:** It is meant that there is influence of play therapy to autistic behavior on children with autism. This suggestion that play therapy has to early given in order to reduced autistic behavior.

Keywords: Play therapy, Autism, Autistic behavior

INTRODUCTION

Growth and development process in children is very important, that process is a process where children optimizing themselves. Optimization of growth and development process in children is a natural process that has already should have occurred in children, because it is related to the function maturation of organ or individual. However, there were still groups of people that are difficult to optimize their growth and development, especially the problem of developmental disorders (Adriana, 2011). Autism is a severe developmental disorder in children. The symptoms are already apparent before the child reaches three years (Maulana, 2007).

Based on data from UNESCO in 2011, recorded 35 million people with autism around the world. It is means average of 6 from 1000 people in the world suffer from autism (Hazliansyah, 2013). At least, one in 50 school-age children in the United States are diagnosed with autism, the number was up 72 percent since 2007, but improved a lot going for mild cases of autism (Rachman, 2013).

Studies in Asia, Europe, and North America have identified individuals with autism with an average prevalence of about 1%. A study in South Korea reported a prevalence of 2.6% (Centers for Disease

Control and Prevention, 2014). Director of Health Mental Development (Bina Kesehatan Jiwa) of Health Ministry, Diah Setia said, estimated that 112,000 children in Indonesia bear autism, in age range of about 5-19 years.

Various attempts were made to reduce autistic behavior, one of with play therapy. Play therapy is a healing technique to children with special needs, using various forms of media games, better without and uses tools that do not harm theirs, and can be implemented outdoors as far as help the learning program.

METHOD

This research uses a pre- experimental research design that is one -group pre - post test design. The population in this research is all autism children who study in SDLB Bhakti Luhur Malang, without have other complications (Attention Deficit Hyperactivity Disorder (ADHD), Down Syndrome) amounted to 15 children. The variables measured on this research are autistic behavior before and after given play therapy. Play therapy is performed 5 sections on each child. Each of them receives play therapy on duration 20 minutes in one section. The autistic behavior observed before and after the play therapy section.

This research analyzes was using the raw scores obtained directly on any existing total score without categorization. This research use Bivariate Parametric Test with Paired T-Test ($\alpha = 0.05$) for statistical analytic and to help this analysis researchers use SPSS for Windows version system 15.

RESULT

Major of children are passive characteristic on autistic, 4 children have aloof and the other (5 children) are active but odd as

see on table 1. Figure 1 showed the pre test 1 and 2 contained 6 respondents (40%), pre test 3, 4 and 5 contained 8 respondents (53%) were mild category. Pre test 1 contained 8 respondents (53%), pre test 2 contained 9 respondents (60%), pre test 3, 4 and 5 contained 7 respondents (47%) were moderate category. Pre test 1 contained 1 respondent (7%) were severe category.

Table 1. Baseline Characteristics (n=15)

		n	(%)
Age (year)	8 – 10	9	(60)
	11 – 13	3	(20)
	14 – 16	2	(13)
	17 – 19	1	(7)
Sex	Male	12	(80)
	Female	3	(20)
Classification	Aloof	4	(33)
	Passive	6	(40)
	Active but odd	5	(27)

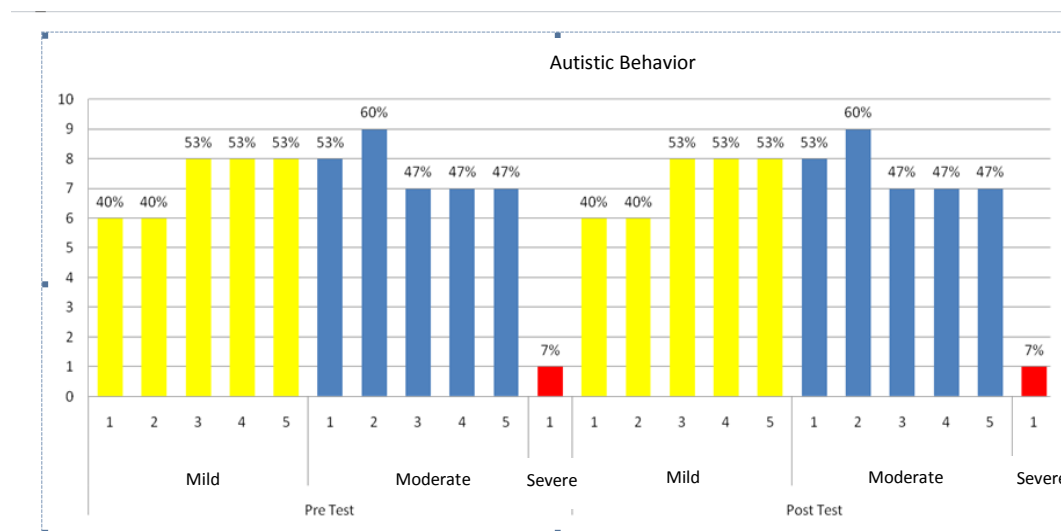


Figure 1. Autistic behavior

Table 2 Paired T-Test towards autistic behavior of children with autism before and after play therapy

	N	Mean	P
Autistic Behavior Before Play Therapy	15	38,13	0,000
Autistic Behavior After Play Therapy	15	32,20	

Figure 1 showed the post test 1 and 2 contained 6 respondents (40%), post test 3, 4 and 5 contained 8 respondents (53%) were mild category. Post test 1 contained 8 respondent (53%), post test 2 contained 9 respondents (60%), pre test 3, 4 and 5

contained 7 respondents (47%) were moderate category. Post test 1 contained 1 respondent (7%) were severe category. Based on Table 2, there is influence of play therapy to autistic behavior of children with autism (value=0,000; $p < 0,05$).

DISCUSSION

Child's behavior like aggressive (kicking sofa seat), behavioral stimulation (plays eyelids), avoiding / do not want to talk, appears excessive fear, and difficult to talk to strangers but able to mention their name even though noncurrent still can be seen clearly in children before given play therapy. This is influenced by inside and outside factor of the children. Factor from within of the child such as age, sex and severity of symptoms, a good age is a child under the age of 3 years, after the child is past that age would be more difficult to control the child's behavior, the worst thing is autistic behavior will continue to stick to them until the child was adult. This is in line with the explanation of Maulana (2007) that the age of 2-5 years, tend to have a very bad habit, but when the age of 6-10 years, improved their behavior, but that behavior would be worse when they are teenagers until adults.

In this research male autistic children more than female, this is in line with explained by Maulana (2007) that male patients are four times higher than female patients, but if the girls did, then will be more serious than boys, and the prognosis is lower than boys.

In this research there is one respondent who behave severe category on the classification of *passive* like seclude their selves, limited communication and aggressive but that child behavior is focused on verbal skills and lack coordination. It is in accordance with the classification of the child who according to Veskariyanti (2008) that children with autism those classified as passive is not trying to establish social contacts, but only receive it and autism children with this classification better visual abilities than verbal skills and coordination.

External factors that expressed by Maulana (2007) as the intensity of the therapy has been given previously influence the autistic behavior because given more frequent therapy also easier to reduce the bad behavior. And also when given current therapy these children still under the age of 3 years, the earlier a child is given therapy the greater opportunity to reduce autistic behaviors.

According to Prasetyono (2008) autistic behavior is different from normal behavior. Autistic has excessive behavior, deficient behavior, or no level behavior. Behavior is

anything that did, said, seen, felt, heard from someone, or done alone.

That things need to be considered in providing play therapy in children with autism according to Prasetyono (2008) is the situation of children, tools and equipment and also playground, approaching, atmosphere and time of playing, and evaluation.

In this research there were 3 children with autism who declined autistic behavior include first respondent who initially were moderate to mild category, third respondent who initially were moderate to mild category and fifth respondent who initially were severe to moderate category. All three respondents were *passive* classification, according to Veskariyanti (2008) that this classification is most easy to handle and also in terms of ability, the autistic child in this group is higher than the *aloof* group.

In terms of age, these three autistic children are 8 years from 15 respondents, this age still quite young and can help the repair behavior process this also is factor that influence the success of therapy proposed by Maulana (2007) that is getting younger the child's age at the time of treatment, the more possibility it is to succeed.

Play therapy is one of therapy by learning while playing is given by a therapist for reducing the autistic behavior of children with autism. Therefore, by looking at several factors that can influence the success of therapy, could be said to be successful if the autistic behavior of children with autism decreased significantly in accordance with the specified time. Handling an autistic child requires a high level of intensity and good discipline, the discipline in question is a discipline that is focused on the therapist as well as the children themselves and their parents or family influence.

From the research results autistic behavior by respondents indicate all respondents decreased autistic behavior, which can be seen on every start score to finish score was changing. It needs for collaboration from other therapies that varying the types of therapies in order to reduce the level of autistic behavior of children with autism. The more therapies that carried the greater opportunity to reduce the autistic behavior of children with autism, and it requires quite a long time, this is in line with the results of research conducted Chusairi, Hamidah and Leonardi (2008) found

that any therapy will not be able to change or improve children with autism in a short time, treatments do require quite a long time, which is approximately 3 hours a day and be continuous and intensive each day within a period of 6 (six) weeks, and within one week, held for 5 (five) days.

Chusairi also added a good result can be seen after the child is getting treatment for a half month or six weeks intensively. Those results will be maintained in a minimum of six months if there is continuity and intensive treatment outside of hour's treatment center. Therefore, the home environment and the surrounding community are also expected to support especially the role of parents and siblings or relatives who live in the house.

CONCLUSION

Most (53%) autistic behavior of children with autism in SDLB Bhakti Luhur Malang before given play therapy is moderate category obtained 8 respondents. Most (53%) autistic behavior of children with autism in SDLB Bhakti Luhur Malang after given play therapy is mild category obtained 8 respondents. There are significant differences of autistic behavior between before and after given play therapy with a value of $p = 0.000 < 0.05$, which can be seen to changes in each score.

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THE EFFECTIVENESS OF NUTRITION RECOVERY PARK ACTIVITY TO GROWTH TODDLERS

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ABSTRACT

Introduction: The malnutrition condition in Jombang 2014 were 0,95%. Therefore, the innovation to tack the malnutrition in Jombang is needed. The innovation of malnutrition to tack in Jombang Regency has been done with groundbreaking program called with theme “Bertabur Bintang”. Beside as, it has been done by training handling toddler malnutrition by nutritional officer at Public Health Center (PKM) with cader about Training Positive Deviance and build Taman Pemulihan Gizi (TPG). Nutrition deficiency will cause of physical growth fairlue and intelligence development, lower productivity. Researcher have aim to know the effectiveness of Nutrition Recovery Park activity to the growth toddlers. **Method:** The Design of researcher is *qusai experiment* with “Pre Post Test Design”. All of toddlers population with less nutrition and malnutrition in Sudimoro Megaluh Jombang. Independent variable is Nutrition Recovery Park activity. Dependent variable is growth of toddlers. The intervention of research in the period of three month the toddler were give the nutrition recovery with 12 days of eating the good nutrition in each months. The assesing of growth are weight/ height by the toddlers. The data will process and analyze using T-Test. **Results:** The result of research show that probability is $< 0,05$ it means there is an effectiveness of Nutrition Recovery Park acivity to the growth toddlers in Sudimoro Megaluh Jombang. The Nutrition Recovery Park program showed signifikanly succes to raised the toddler’s nutrition. Therefore, a good team work between health service and government is needed to make this program succes.

Key word: Nutrition Recovery Park, growth, toddler

INTRODUCTION

Nutrition have a role which no doubt at the grow of child especially between the relation with the child environment from womb until adult. Nutrition is one of determinant qualities of human resources, because malnutrition will become physical growth fairlue and intelligence development, lower productivity, duraby of body so it will increase the pain and death (Depkes RI, 2007). At the baby and toddler lower nutrition can cause of disruption of growth and phisical development, mental and spiritual (Ali, 2008).

From ten province in Indonesia shows that the higher malnutrition in East Java province that occupied third position with the total babies and toddlers reach 434 thousnad peoples. Total toddlers BGM in Jombang Regency at 2014 is 0, 95%, the number still

under the limit tolerance in minimum service standart at 2014. At the meantime, total toddlers have lower nutrition and malnutrition in Sudimoro are 15 toddlers.

The innovation activity to tack the malnutrition with the theme Bertabur Bintang is an acronym from “Together Tackling the Children’s Malnutrition” through was give information to family, weigh the child, give a balanced nutrition. The real step followed the groundbreaking with a nutritional service centers was equipped with a smart house. Beside as, it has been done the training of handling toddler malnutrition in nutritional officer at centers health and midwives with cader about training Possitive deviance and formation of Nutrition Recovery Park.

METHOD

Research design is all of planning that research to answer the research question and was anticipate some of difficulties that maybe arise during a research process. Based on the aim on research design used *quasi experiment* desgin with “*Pre Post Test Design*”. With the problem of research, the researcher chooses one location in Sudimoro Megaluh Jombang during Juni – August 2015. The population all of toddler have lower nutrition and malntrition using total sampling the sample size is 10 toddlers. Identification of variable from this research is Independent Variable is activity of Taman Pemulihan Gizi (TPG) and Dependent variable in this research is toddler growth.

RESULT

Table 1 Distribution of respondent frequency based on toddler gender, education and job in Sudimoro Megaluh Jombang.

No	Criteria	Frequency	Prosentase (%)
1.	Male:		
	a. Male	7	70
	b. Female	3	30
2.	Education:		
	a. Basic	5	50
	b. Medium	5	50
3.	Job:		
	a. Work	10	100
	b. Unemployment	0	0

Source: Data Primer, Juni 2015

Table 1 shows almost all of respondent (70) is male, a half of respondent (50 %) is Basic Education and Medium and respondent 100 % work.

Table 2 Distribution frequency of growth toddler before do Nutrition Recovery Park activity

No	Nutritional Status	Frequency	Prosentase (%)
1	Lower	10	100
	Total	10	100

Based on table 2 shows of all respondent (100 %) nutritional status is lower before do Nutrition Recovery Park activity.

Table 3 Distribution frequency of growth toddler after do Nutrition Recovery Park activity

No	Nutritional Status	Frequency	Prosentase (%)
1	Good	10	100
	Total	10	100

Source: Data Primer, Juni 2015

Based on table 3 shows of all respondner (100%) nutritional status is good after do Nutrition Recovery Park activity.

Table 4 The Effectiveness of Nutrition Recovery Park activity to toddler Paired Sample Test

		Paired Differences						
		95% Confidence Interval of the Difference			t		df	Significance (2-tailed)
Mean	Std. Deviation	Lower Bound	Upper Bound					
Paired Sample 1	Before After	.900	.316	.100	.674	1.126	9	.000

Using two-tailed T-test, the t valve was more than t table with df = 9. The p value was less than 0,05. This can be conclude that the toddler’s nutrition significantly increased using Nutrition Recovery Park activity.

DISCUSSION

1. Toddler growth before done Nutrition Recovery Park activity

The research result before done TPG activity in Sudimoro Megaluh Jombang all of respondent have a less nutrition (100%). The data of mother growth showed at table 2, a half of respondent have medium education (50%) and all of mother growth (100%) is unemployment.

The growth is increasing number and size of the cell in all the body that kuantitative can count. Another meaning is physicalogy change as a result of process physical fungsion normally to child health, in the passage moment, another side growth is kuantitative change that refers to the number, large and spacious that the concrete nature and kuantitative change at the material is cause from environment.

The growth just not mean kuantitative, because not long time material is kuantitative. The example of kuantitative material are atom, cell, chromosome, hair, etc. Another side, kualitative is material too are impression, desire, idea, education and score (Hidayat, 2007; Kartono, 2011; Syah, 2011; Ahmadi, 2011) based on research statement from Lina (2011). Family is one effect to child growth, beside that parents job, parents education and persons in family be hanging of dependents. Education can be an effective if toddler mother was served eating menu based on the child age. Education is studying process that important education is a growth process failure or change be better, more adult and more between another individu, group and sociality (Notoatmojo, 2003). The job can become a good effect to toddler growth, because job was needed that must do lived and their family lives. From job someone can do anything benefits to our self, to family and have many experiences. Job factor cause someone busy with their jobs (Nursalam, 2003).

The result of research showed that another education, there are another factor can change to give toddler nutrition. If it has showed from mother education with the medium education is more easy to get information about needs of the toddler nutrition with their age. From their job, all of respondent is unemployment and be better if their mothers have more time to keep there child but the fact it is not. In real time the toddler have less nutrition because more toddler mothers was giving instant foods and snack are not complete of nutrition value.

2. Toddler Growth After done Nutrition Recovery Park Activity

The research result after done Nutrition Recovery Park activity in Sudimoro Megaluh Jombang all of respondent get a good nutrition (100%). The mother data shows that

at table 2 a half of toddler mothers have medium education (50%) and all of toddler mother unemployment (100%).

The growth is increasing the number and size of the cell in all the body that kuantitative can caount. Another meaning is physicalogy change as a result of process physical fungsion normally to child health, in the passage moment, another side growth is kuantitative change that refers to the number, large and spacious that the concrere nature ans kuantitative change at the material is cause from environment.

The growth just not mean kuantitative, because not long time material is kuantitative. The example of kuantitative material are atom, cell, chromosome, hair, etc. Another side, kualitative is material too are impression, desire, idea, education and score (Hidayat, 2007; Kartono, 2011; Syah, 2011; Ahmadi, 2011) based on research statement from Lina (2011). Family is one of effect to child growth, beside that parents job, parents education and persons in family be hanging of dependents. Education can be an effective if toddler mother was served eating menu based on the child age. Education is studying process that important education is a growth process failure or change be better, more adult and more between another individu, group and sociality (Notoatmojo, 2003). The job can become a good effect to toddler growth, because job was needed that must do lived and their family lives. From job someone can do anything benefits to our self, to family and have many experiences. Job factor cause someone busy with their jobs (Nursalam, 2003).

The result of research showed that another education, there are another factor that can change to give toddler nutrition. If it has showed from mother education with the medium education is more easy to get information about needs of the toddler nutrition with their age. From their job, all of respondent is unemployment and be better if their mothers have more time eas keep there child but the fact it is not. In the real time the toddler have less nutrition because more toddler mothers was giving instant noodle and snack from stalls that its not complete of nutrition value.

The result of research shows that education not absolute can become decisive to successfull of patterns, parenting, not

necessary the education will bring successfully in handling with the less nutrition. Parenting is one factor that affect in fulfillment of toddler nutritional needed because factors of toddler mother diligence was given nutrition do their child that can support weight increasing. Toddler nutrition status after Nutrition Recovery Park activity has increase because active kader, if a toddler mother who can not invite their toddler to Nutrition Recovery Park so will be picked up by kader. At Nutrition Recovery Park activity the toddler must eating there, so it was observed by kader about their food eat.

3.The Effectiveness of Nutrition Recovery Park Activity to Toddler Growth

The research result showed that there are an effective of Nutrition Recovery Park activity to toddler growth, because the role kader in Nutrition Recovery Park services be better and toddler mother exposed information about nutrition problem. Another toddler was given fed there, toddler mother taught how to cook completely and was given menu schedule appropriate with toddler age, so the toddler can develop normally.

CONCLUSTIONAND RECOMMENDATION

The conclusion is that the respondent showed increase the nutrition after joining the Nutrition Recovery Park program. This research still have low number of respondent, therefore another research as following result must be done in other area of Jombang. The health service and government should working together to make this program successful.

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RELATIONSHIP BETWEEN THE BIRTH WEIGHT AND PERINEAL RUPTURE IN NORMAL LABOR IN PRIMIPAROUS WOMEN

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ABSTRACT

Introduction : Perineal rupture which can be resulted from the baby's birth weight mostly happens in the first labor and often appears in the next labors. The early survey shows the high incidence rate of perineal rupture in normal labor. Therefore, this research was purposed to find out the relationship between the birth weight and the level of perineal ruture in normal labor in primiparous women visting Puskesmas Taman Sidoarjo. **Method :** the design of research done from October until December 2015 was cross sectional. The population involved the primiparous women, totally 23 people visiting Puskesmas Taman Sidoarjo, in which 22 respondents were chosen as the samples by using the simple random sampling technique. The data were analyzed by using Spearman's Rank test with the $\alpha < 0.05$. **Result :** the result of research showed that nearly all of the primiparous women delivered their babies with normal birth weight (81.8%), whereas most of them experienced the perineal rupture level II (68.2%). The result of Spearman's Rank test showed that $p = 0.021$ in which $0.021 < 0.05$ so that H_1 was accepted illustrating that there was a relationship between the birth weight and the level of perineal ruture in normal labor in primiparous women visting Puskesmas Taman Sidoarjo. **Discussion:** In conclusion, the higher the birth weight is, the higher the risk of perineal rupture will happen. Therefore, the antenatal care should be developed more, especially in monitoring the birth weight during pregnancy because the fetal weight can be esimated by the increase of the mother's birth weight.

Keywords: birth weight, perineal rupture, primiparous

INTRODUCTION

Rips through the birth canal is the second most common cause of postpartum hemorrhage. Rupture perineum occurs in almost all the first delivery and it is not uncommon in labor next, errors in technique straining can also affect the occurrence of rupture of the perineum that when maternal straining while lifting buttocks, than it makes the process of pushing is not a maximum, can also exacerbate rupture perineum (Cunningham, et al, 2006). Birth weight effect on perineal stretching the perineum rigid so as easily rupture (Cunningham, 2005). Spontaneous laceration of the vagina or perineum may occur when the head and shoulders are born. Laceration incidence increases when babies are born too soon and not controlled. Rupture perineum to cause maternal postpartum hemorrhage.

Fetal factors that cause rupture of the perineum is the birth weight, abnormal head position, shoulder dystocia, breech disorders

and others. Birth weight more than 4000 grams may increase the risk of rupture of the perineum this is caused by the perineum is not strong enough to withstand the strain the baby's head with a large weight babies (Wiknjastro, 2007). Impact of perineal lacerations if not immediately anticipated it will cause a tear in the perineum comprehensive, result in postpartum hemorrhage and if not promptly treated can lead to anemia which will facilitate the occurrence of infection in the puerperal period.

Efforts to be made by health care workers is among the second stage, perineum rupture can be prevented by hand and anticipated maneuvers with good cooperation with the mother before and during delivery takes place. Provide guidance and breathing and relaxation techniques are good, the birth of the head can be controlled and allow time for the skin to stretch and reduce the possibility of rupture or laceration of the perineum. Objectives Knowing the relationship between birth weight with the degree of perineal rupture in normal

labor primipara mothers in Puskesmas Taman Sidoarjo .

RESEARCH METHOD

This type of research is cross sectional analytical ie where researchers take measurements or observations of variable data birth weight and degree of rupture perineum only one at a time. The population of this research is all primiparous mothers who gave birth in the health center park 23 respondents. The sample in this study is the mother primiparity in Taman Sidoarjo PHC as much as 22 respondents. The research was conducted in October to December 2015.

This study was conducted in Puskesmas Taman Sidoarjo. In this study, the sampling method used was probability sampling with simple random sampling technique. processing of data by cross-tabulation in the form of a percentage (%) and using the Spearman rank test and a significance level $\alpha = 0.05$.

RESULT

Most of primiparous mothers who deliver their babies with low birth weight experienced a rupture perineum stage I (75%) and a small percentage experiencing rupture perineum

No	Birth weight	Frequency	Percentage (%)
1.	BBLR	4	18,2
2.	BBL Normal	18	81,8
3.	Big BBL	0	0
Amount		22	100

Almost entirely of 22 respondents give birth to babies with normal birth weight (81.8%).

b. Characteristics of respondents based on the degree of rupture perineum

No	Degree of Rupture Perineum	Frequency	Percentage (%)
1.	Derajat I	6	27,3
2.	Derajat II	15	68,2
3.	Derajat III	1	4,5
4.	Derajat IV	0	0
Amount		22	100

Most of the 22 respondents ruptured perineum stage II (68.2%).

c. Cross-tabulation of the relationship between birth weight with the degree of rupture perineum

No.	BBL	Degree of Rupture Perineum			Amount
		Degree I	Degree II	Degree III	
1.	BBLR	3 (75%)	1 (25%)	0 (0%)	4 (100%)
2.	NormalBB	3 (16,7%)	14 (77,8%)	1 (5,6%)	18 (100%)

stage II (25%). While nearly all primiparous mothers who give birth to babies with normal birth weight experienced a rupture perineum stage II (77.8%), experienced a rupture perineum fraction stage I (16.7%) and stage III (5.6%). Spearman Rank test results obtained $p = 0.021$, then $p < 0.05$, mean H_0 rejected and H_1 accepted that there is a relationship between birth weight with the degree of perineal rupture in normal labor primipara mothers.

DISCUSSION

The results of 22 studies described normal delivery primipara mothers, there were 14 respondents who gave birth to babies with normal birth weight, almost entirely (77.8%) experienced a rupture perineum degrees II. In infants born weighing less than 4000 grams at generally does not cause birth canal laceration as stretched muscles - the muscles of the perineum in accordance with the diameter of the baby's head is born. But in fact, normal birth weight can also caused a rupture perineum, it is influenced by factors - another factor that is one way of pushing the mother wrong, because at the birth mother is not abiding by what is recommended by the birth attendant. Characteristics of respondents by birthweight.

L				
Amount	6 (27,3%)	15 68,2%)	1 (4,5%)	22 (100%)

Most mothers pushing before the complete opening, not least also the mother at the time straining while lifting buttocks. Although the weight of babies born to normal if the way of pushing the mother of one, can still occur rupture perineum.

Rupture of the perineum is influenced by several factors among which factors maternal and birth attendant factors. Maternal factors that consists of several factors that precipitate parturition, loose or too strong, perineum fragile and edema, primiparous, varicose pelvic or scarring of the perineum and vagina as well as the flexibility of the birth canal. The first factor is the labor of confinement precipitate too quickly at less than 3 hours. Officers are often not ready to attending births and mothers pushing strong uncontrolled deflection of the fetal head occurs too quickly. This situation will increase the possibility of perineal lacerations (Manuaba, 2008). Second, loose or too strong. At the time of delivery of the energy required in the form of encouragement meneran mother if the mother straining too strong during delivery head which is the largest diameter of the fetus, it will cause perineal laceration (Winkjosastro, 2006). Third, perineum fragile and edema. In the process of childbirth in case of edema of the perineum then pervagina labor should be avoided because it will surely occur perineal lacerations (Manuaba, 2008). The fourth is a primipara. When labor is going to be pressure on the soft birth canal by the head of the fetus. Perineum intact on primi will easily occur perineal laceration (Manuaba, 2008). The fifth factor is maternal pelvic varicose or scarring of the perineum and vagina. Sixth, the flexibility of the birth canal. Flexibility of the birth canal is reduced when mothers are lack of exercise, or genital infections often. Infants who have a maximum head circumference will not be passed, if imposed will result in perineal laceration irregular and wide.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the results of research and discussion can be summarized as follows:

1. Almost all mothers primiparous in Puskesmas Taman give birth to babies with normal birth weight.
2. Most of the mothers primiparous in Puskesmas Taman experienced rupture perineum degrees II.
3. There is a relationship between birth weight with the degree of perineal rupture in normal labor primipara mothers in health centers Taman Sidoarjo.

Recommendation

Based on the above conclusions, the suggestions of the researchers is:

1. Theoretical results of this study can be used in order to prove the theory that one factor in the rupture of the perineum in primiparous mothers is due to birth weight.
2. Practical
 - a. For this study Health Officer for health workers should be able to be used as input and information in health care improvement ANC, especially in monitoring the increase or decrease in maternal weight during pregnancy. Fetal weight is affected by the increase or decrease in maternal weight, so the mother must maintain and regulate his diet because the larger the fetus is born will increase the risk of rupture of the perineum.
 - b. For the Profession of Nursing This study for nurses to be used as consideration in order to improve the quality and standard quality nursing care, to optimize the assessment of maternal primipara who experienced rupture perineum, in order to do the determination of a proper diagnosis so that intervention is carried out in accordance with the existing problems , and can be used as a reference to anticipate as early as possible causes of the risk of rupture of the perineum in primipara mothers.
 - c. For this research study place that is used as a benchmark ANC and INC that has been given to the mother primipara, especially in anticipation of the increase in maternal weight during pregnancy and minimize the occurrence of rupture of the perineum during childbirth.

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THE SPOUSE'S INVOLVEMENT IN ASSISTING WOMEN LABORING AS SECTIO CESAREAN WAY IN THE IMPLEMENTATION OF EARLY INITIATION OF BREAST FEEDING AT HOSPITAL

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ABSTRACT

Introduction: Section caesarean laboring is one of the difficulties to do early initiation of breastfeeding. It is correlated with painful because of post of injury, anesthesia influence, uncomfortable mom, and the breastfeeds which is not ready to produce after operation. Although she already had an anesthesia, but she still suffers the painful. The readiness of mother to give the baby breastfeed, it needs more preparation psychologically, because the mother had her role. The mother's role achievement can be success if the mother become closer with the baby and get the support from the spouse (as father). The spouse's role in the implementation of early breast feeds initiation is very important. Because the spouse will be assist to determine reflect fluency of breastfeeds which is most affected to the emotional or mother's soul. The spouse has an active role in support mother when giving the breast feeds. He can help mother in supporting the breastfeeds with emotional supported and other assistance. **Methods:** This research used descriptive with cross sectional approach, the aims to gain the data from respondents to answer the strategic issues which happen. The factors that make mother of Post SC did not do the early breastfeed initiation. The respondents were 60 mother of post SC that fulfills the criteria of inclusion and exclusion. **Results:** The Spouse mostly had positive support and interaction in early initiation of breastfeeding (43%), but still low number of breastfeeding implementation (9%). **Discussion:** The support and interaction of spouse to the mother who giving a experience the SC is one of the important factor of early initiation of breastfeeding. But, the low number of the implementation of ealy initiation of breastfeeding showed that there are still many factor that cant influenced the positive achievement of early initiation of breast feeding.

Key words: Caesarian Delivery, Initiation of Breast Feeding, Spouse's Involvement

INTRODUCTION:

The implementation of early breastfeeds initiation is affected by the laboring method. The section-caesarean's (SC) method is one of the difficulties to do the early breastfeeds initiation. It is connected with the painful of operating injured, anesthesia influenced, uncomfortable mother, and the breastfeeds which is not ready to produced after operation (Prior, 2012). Although the anesthesia has given but the mother still felt painful. Padmayanhi (2009), in her research showed the reason why mother did not give the early breastfeeds to her child is caused by the painful of operating injury (92%), uncomfortable (78%), anesthesia effect (74%). The post SC painful will be stricken the mother's ability if it was not directly solved to do the early breastfeeds initiation (Storm, 2007).

The other problem post SC that experienced by the mother beside the painful is

anxiety. This anxiety is happen caused by situational crisis when face the SC laboring, self related belief threatening with the health of both mother and baby, and interpersonal communication, which has signed to the increased concern, distress, the anxiety of something happen, the feels that enable to caring the baby maximally, and nervous (Doengus, 2011). The excessive anxiety can get the worst effect to the mom and baby, like the mother experience the post-partum depression (Skoteris, et al, 2008), can influenced the physical condition and mental of both mom and baby (Fertl, et al. 2009), also retardates of physiology function and the psychology improvement of the baby (Monk, 2011).

The research by Sumanto and Friends (2011) about the painful correlation between anxiety achievements to the post SC patient said that there was a correlation between painful levels with anxiety level to the post SC

patients. The higher level of some one painful, it has a higher anxiety also.

The readiness of new mother to give breastfeeds to the baby needs more psychologies preparation, because of the chance of mother's role. Based on the nursing theory *Maternal Role attainment-becoming a Mother* which improved by Ramona T. Mecer, that proposed the main focused from this research is process image of mother's attainment and the process of being a mom. The role of mother attainment can be succeeded if the mother close with the baby and get the spouse's support such as satisfaction expression and the appreciation role after laboring (Alligood, 2002). The role spouse in the implementation of early breastfeeds is very important Because the spouse will be assist to determine reflect fluency of breastfeeds which is most affected to the emotional or the mother's soul. The spouse has an active role in support mother when giving the breast feeds. He can help mother in supporting the breastfeeds with emotional supported and other assistance. Early breastfeeds initiation becomes a recommendation of *World Health Organization (WHO)* as a *baby-friendly hospital initiative* (WHO, 2012).

METHODS:

This research used descriptive with cross sectional approach, the aims to gain the data from respondents to answer the strategic issues of early breastfeeds initiation which happened. The issues are including the factors that make mother who giving birth by SC did not do the early breastfeed initiation. The respondents are 60 mother post SC that fulfills the criteria of inclusion and exclusion. Inclusion criteria: the pregnancy age > 37 weeks, mother with anesthesia SAB, mother agreed become a respondent, the sign of breast prominent, the indication of SC is not because of PEB/ eclampsia. Exclusive criteria: the baby with abnormal congenital, the baby is not healthy, mother with SC complication.

RESULTS:

Spouse's involvement in assisting women giving birth in the SC in implementing the early initiation of breastfeeding consists categorized into 2 categories, they are:

- a. Support spouse.

Almost the spouse supports the implementing of early initiation of breastfeeding wife even though her labor with SC method. But implementation of early initiation of breastfeeding remains low.

Table 1: spouse's support to post SC mother in the implementation of early initiation of breastfeeding

N	Indicato	IMD		No IMD		Total	
		(f)	(%)	(f)	(%)	(f)	(%)
1.	Spouse' support: Positive	4	9	3	91	4	10
2.	Negativ e	4	23	1	77	1	10
				3		7	0

Most of the mothers who have positive support from spouse did not do the early initiation of breastfeeding

- b. Spouse's interaction

Table 2: spouse's interaction to the post SC mother to did the early initiation of breastfeeding

N	Indicato	IMD		No IMD		Total	
		(f)	(%)	(f)	(%)	(f)	(%)
1.	Spouse' support: Positive	4	9	3	91	4	10
2.	Negativ e	4	23	4	13	1	10
						7	0

Nearly all the women who get a positive interaction of the spouse about the implementation of early initiation of breastfeeding did not do it.

DISCUSSION:

The early initiation of breastfeeding spouse's involvement in the implementation of maternal post SC includes support and empathy. In achieving the role (role Attainment) the woman who had just given birth needs the support of her spouse. But the results of this study almost all spouses have provided support and interaction to his wife. But implementation of early initiation of breastfeeding is still low.

As an effort to reach the mother's role is influenced also by a set of cycles Microsystems, mesosystems and macrosystem. Micro System is the immediate environment in which the role of the mother has achievement. Mikrosistem components include family functioning, mother-father relationship, social support, economics status, family trust and newborns stressor are seen as individuals inherent in the family system. Mercer (1990) revealed that the family is seen as a semi-closed system which maintains restrictions and oversight between the change in the family system and other systems. Mesosystem includes the influence and interaction with individuals in mikrosistem. Mesosystem can affect the development of the role of mother and baby. Mesosystems include child care, schools, workplaces, places of worship and the environment generally in society. Micro system is a culture on the individual environment. The macro system consists of social, political, cultural, and health system policies that impact on maternal role attainment.

The results of this research showed that the mother-father relationship has been established. So the low implementation of the early initiation of breastfeeding is not possible only because of the father-mother's relationships. The other factors such as the condition of the mother, the baby, the provider, and the healthcare system may also influence the implementation of early breastfeeding initiation.

CONCLUSION

Involvement of the spouse to the mother who gave birth to by SC in the implementation of the early initiation of breastfeeding is very big, but the achievement is still low. It showed there are still many other factors that affect the implementation of the early initiation of breastfeeding in the mother

post SC, among other maternal factors itself, infant factors (micro components), meso component and macro components.

The need for further research to find a definitive answer on preventing the implementations of the early initiation of breastfeeding in the mother post SC, Because the excellent benefits of the early initiation of breastfeeding for the growth and development of generation in Indonesia.

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VIRTUAL REALITY GAME IN CHILDREN WITH DEVELOPMENTAL COORDINATION DISORDER LITERATURE REVIEW

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ABSTRACT

Introduction: Children have developmental coordination disorder (DCD) are at greater risk of obesity, musculoskeletal disorders, low social confidence and poor mental health. Children DCD are a downward spiral of poorer motor development, psychological and health outcomes. The purpose of this literature review was to find a method to increase motoric coordination it have physic activity and state of soul that more good to children have motoric development disorder.

Method: Keywords used developmental coordination disorder and child. Of keywords that are typed appears 4010 article. Of the 4010 clinical trial conducted filters, full text available and published the last five years, so the articles that appear as many as 17 articles. 17 articles contained three articles taken appropriate. **Result:** The intervention done with physiotherapy, family counseling related to physical activity and virtual reality game. Physiotherapy will be effective if done before children aged 2 years. Family counseling related to physical activity adherence can not be predicted, measurements were carried out long enough period and the effectiveness of interventions can only be assessed after the end of the study. Virtual reality electronic games may improve these children's skill by providing gross motor practice involving a high level of visual-spatial integration. Virtual reality is the most effective method that showed new virtual reality (VR) game interfaces may provide motor experiences that enhance motor development and lead to an increase in motor coordination and better physical activity and mental health outcomes.

Keywords: developmental coordination disorder, child, virtual reality and game

INTRODUCTION

Developmental Coordination Disorder (DCD) defined as lacking developmental, age-appropriate motor skills, and characterised by motor performance impairment that creates functional performance deficits not likely to be due the child's age, intellect or other diagnosable neurological or psychiatric disorder. 5 to 15% of children have DCD.

Underlying deficits identified in children with DCD include poor sensory-motor integration and in particular, poor visuomotor processin or cross-modal integration (visual-kinaesthetic). Children with DCD also have poor timing and force control and it has been argued that there may be a disruption in the central timing mechanisms, usually linked with cerebellar function. A recent review found that these children are less physically active and have lowe levels of fitness. Children with DCD are thus at greater risk of insufficient physical

activity (PA) and a downward spiral of poorer motor development, psychological and health outcomes (Strake *et al.*, 2011).

Management will do to children with haves motoric development disorder is physiotherapy, family counseling related to physical activity and virtual reality game. Research done discussed about effectiveness from physiotherapy. It is discussed about physic activities stated that interesting to children growth. But more 80% Australia Children less do physic activity can cause health problem likes obesity, diabetes type 2 and risk occurred in cardiovascular system.

The children boy developmental coordination disorder have a risk occurred of obesity that gather from children girl. In fact found that the child have developmental coordination disorder showed that have low physic activities. They are not show their physic activity to others. The children have

developmental coordination disorder that consider them self that have limited physic ability so it can occurred anxiety and depression symptom. This will impact the future to the child. Virtual reality is interactive stimulation that focus to life environment. Virtual reality aims to give audio visual stimulation and motor with the real environment and the users can actively engage directly there (Strake *et al.*, 2011).

Therapeutic play with application interactive technology virtual reality is interactive stimulation using hardware and software that give children opportunity to interaction with their environment that almost the same with the real object. Therapeutic play adjusted with the gender children, age, skills, type of diseases and general condition.

The children have an option to choose kinds of games. A play motion system were installing in games area the computer vision algorithms and the real-time, so the children can interaction with games object. Therapeutic technology play interactive virtual reality gave experiences that happily were during physic interaction with different environment. So, can increase self esteem and self-empowerment in clinic area (Li, Chung, Ho, & Chiu, 2011).

LITERATURE REVIEW

The first treatment is physiotherapy. Study protocol: an early intervention program to improve motor outcome in preterm infants: a randomized controlled trial and a qualitative study of physiotherapy performance and parental experiences, presents a health promoting individually customized physiotherapy program designed for preterm infants before they reach term age to improve the infants' motor development. The Norwegian Physiotherapy Study in Preterm Infants provides an opportunity to determine whether an individually customized three-week physiotherapy program for preterm infants in the NICU, will enhance the infants' motor development at two years corrected age. The study, called "The Norwegian Physiotherapy study in preterm infants" (NOPPI) stated Physiotherapy will be effective if done before children aged 2 years to improve the baby's growth motor (Øberg, *et al.*, 2012).

The second treatment is family counseling related to physical activity. A family based tailored counselling to increase non-exercise physical activity in adults with a

sedentary job and physical activity in their young children: design and methods of a year-long randomized controlled trial state that this unique family based intervention to improve lifestyle behaviours in both adults and children can provide translational model for community use. This study can also provide knowledge whether the lifestyle changes are transformed into relevant biomarkers and self-reported health.

Parents of young children typically report low level of physical activity and many can be classified as inactive. At the same time, parents face multidimensional challenges to support physical activity in their children. While the physical activity guidelines stress the importance of moderate-to-vigorous exercises in both children and adults, evidence is merging that even small amounts of physical activity can have health-related benefits. Based on Bandura's social cognitive theory, a child learns by imitating and copying other people and by making own reasons founded on these social situations. Own parents and siblings act as one of the most powerful role models to a young child. Thus, the family environment is in key position influencing child's physical activity habits taking shape in the childhood.

This study in implementing intervention to both parents and their children at the same time. There are challenges in this trial. Firstly, the compliance cannot be foreseen. The subject group is at very busy stage of life making careers with small children and a year-long commitment may result in considerable attrition rates. Further, the measurements are done long enough periods 5 times during the year to assess the altered behavior. The effectiveness of the intervention can only be assessed after the end of the study (Finni, *et al.*, 2011).

The third treatment is virtual reality game. Rationale, design and methods for a randomized and controlled trial of the impact of virtual reality games on motor competence, physical activity, and mental health in children with developmental coordination disorder explains that a critical feature of video capture VR games is that it requires arm, leg or whole body movement. Video capture VR may thus enable children to play electronic games without the previously observed detrimental physical effects. Each child will participate in both conditions for 16 weeks.

VR has demonstrated some improvements in motor performance in case studies of children with cerebral palsy argue that VR is an ideal tool for remedial program involving attention and movement disorders, and discuss its use in the context of stroke patients. However, VR electronic games may improve these children's skill by providing gross motor practice involving a high level of visual-spatial integration, but in a context which is private, and provides strong motivation by enjoyment of the game and the challenge of self-competition. Suggests VR games could improve real world motor skill in children and could increase children's confidence, which would be additionally beneficial for children with DC (Strake *et al.*, 2011).

METHODE

Keywords used developmental coordination disorder and child. Of keywords that are typed appears 4010 article. Of the 4010 clinical trial conducted filters, full text available and published the last five years, so the articles that appear as many as 17 articles. 17 articles contained three articles taken appropriate.

RESULT AND DISCUSSION

Virtual reality is the most effective method that showed new virtual reality (VR) game interfaces may provide motor experiences that enhance motor development and lead to an increase in motor coordination and better physical activity and mental health outcomes. VR games are beginning to be used for rehabilitation, however there is no reported trial of the impact of these games on motor coordination in children with developmental coordination disorder. Found electronic game playing lead to enhanced. eye-hand coordination, dexterity and fine motor ability and increased reaction and movement speeds. It may therefore provide gross motor experiences that are not available when interacting using traditional interfaces such as keyboard, mouse or game pad. We and others have recently reported significant increases in energy expenditure, heart rate and ventilation volume when children played a game with

video capture VR compared to a traditional interface. VR may be particularly successful for children with DCD as it does not require the child to perform in front of other children. Lack of PA in children with DCD has been attributed to their unwillingness to display their poor skill to others (Strake *et al.*, 2011).

CONCLUSION

Virtual reality is the most effective method that showed new virtual reality (VR) game interfaces may provide motor experiences that enhance motor development and lead to an increase in motor coordination and better physical activity and mental health outcomes.

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ANALYSIS OF THE FACTORS AFFECTING THE FIRST STAGE OF LABOR LENGTH PERIOD IN LILIK MATERNITY HOSPITAL SIDOARJO

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ABSTRACT

Introduction: Maternal mortality rates by Indonesia Demographic Health Survey (IDHS), was extremely high maternal mortality rate in Indonesia in 2013 228/100,000 live births. This figure shows that Indonesia is still the country with the highest maternal mortality rate in Southeast Asia this means more than 18,000 mothers die from a year or two women die every hour because of pregnancy, childbirth and postpartum. The first stage of labor is the dilatation that goes from zero to full dilatation. The first period to primigravid about 12 hours while at multigravida lasts for 8 hours. The purpose of this study was to analyze the factors that affect the first stage of labor length period in Lilik maternity hospital Sidoarjo. **Method:** This study is a quantitative study with a descriptive analytic cross sectional approach. Sampling using purposive sampling and research instrument uses observation sheets and questionnaires . Research sample as many as 30 mothers giving birth. Data analysis using chi -square test for relationship and logistic regression to examine the influence. **Results:** The results showed that factors associated with the first stage of labor length period is the age ($p = 0.013$), parity ($p = 0.030$) and contraction ($p = 0.000$) . **Conclusions:** Variables associated together with the first stage of labor length period is the age, parity, and contraction . Variables associated most strongly is contraction ($OR = 22,941$, 95% CI).

Keywords : the first stage of labor length period

INTRODUCTION

Every pregnant woman who faced some situations that may occur in connection with the pregnancy , such as the development and safety of the fetus in the womb until it was time to be born. Childbirth is a normal physiological occurrence traversed by the mother and the birth process requires the sacrifice of a mother (Erawati , 2010) .

One of the program targets the health of mothers and children (MMR) established in Indonesia Millennium Development Goal's (MDGs) is to reduce the maternal mortality rate to 102 per 100,000 live births in 2015. The maternal mortality rate by survei Indonesian Demographic Health (SIDH) is still very high ie in 2013 MMR in Indonesia 228/100,000 live births. This figure shows that Indonesia is still the country with the highest maternal mortality rate in Southeast Asia this means more than 18,000 mothers die from a year or two women die every hour because of pregnancy, childbirth and postpartum (Kemenkes RI, 2014).

Labor and birth are normal expenditure process that occurs in the fetus full-term pregnancy. The duration of normal pregnancy is 280 days (40 weeks), born spontaneously with a presentation that took place in the back of your head 18 hours in primipara mothers, without complications for both the mother and the fetus (Saifuddin , 2008).

Childbirth is divided into 4 stages. At the first stage the cervix opens from 0 to 10 cm. The first stage is also called dilatation. The second stage is also called the expenditure when the fetus is pushed out by his force and strength straining. In the third stage or also called urie period. The placenta separates from the uterine wall and be born. The fourth stage starting from the birth of the placenta until 2 hours later (Sumarah, 2008).

Some factors that affect labor, among others : power factor include : contraction, age, parity. Passanger factors include: large fetus, fetal weight. Factors passage includes: the hard parts of the pelvis (pelvic bones) and soft parts (muscles, tissue, and ligament). Helper factors : skill birth attendants, Psychological

factors include: anxiety, fatigue, exhaustion, and concern (JNPK-KR, 2008; Siswosudarmo 2008; Varney, 2008; Wiknjosastro 2007; Yanti, 2010).

The first stage labor is the opening that goes from zero to full opening. the first stage period to primigravida about 12 hours while at multigravida lasts for 8 hours. Based Battle opening friedman primi 1 cm / hour and multi 2cm / hour (Manuaba , 2007).

Based on the above background, researchers interested in conducting research titled "Analysis of Factors Affecting the first Stage of Labor length period In Lilik maternity hospital Sidoarjo regency."

RESEARCH METHODS

This research is descriptive analytic through a survey conducted to explain the relationship between the independent variables are the factors that influence the first stage of labor length period (age, parity, contraction, the outer pelvis size, estimated fetal weight, skill birth attendants and anxiety) with the dependent variable is a the first stage of labor length period and explain the influence jointly independent variable on the dependent variable. This research is a quantitative study with cross sectional approach.

Primary data collection was done by direct observation of respondents use observation sheets and questionnaires . The data collection also with documentation study guide KIA. This research was carried out from 1 December 2015 until 29 February 2016 in Lilik maternity hospital Sidoarjo. Samples obtained are 30 mothers who gave birth normally and taken with Purposive Sampling technique.

RESULTS

Bivariate analysis using Chi Square test analysis to determine the influence of independent variables with the variable

dependentnya will be evidenced in the table 1. Based on Table 1 it can be concluded that age had a positive relationship with the first stage of labor length period, this is evidenced by Chi Square test (χ^2) and $p = 0.013$; $P < 0.05$. Variable Parity also have a positive relationship with the first stage of labor length period as evidenced by the value of $p = 0.030$; $P < 0.05$. Variable contractions have a positive relationship with the first stage of labor length period and very significant first, this is evidenced by the results of Chi Square test (χ^2) and the p-value < 0.001 .

Unlike the other four independent variables , the results of the statistical test Chi Square (χ^2) showed there was no correlation between the outer pelvis size, interpretation Fetal Weight, skill birth attendants and Mother Maternity Anxiety Level with the first Stage of Labor length period. This is evidenced by the value of p value is more than 0.05 so it can be concluded that there is no relationship between the four variables with the first stage of labor length period in Lilik maternity hospital Sidoarjo.

DISCUSSION

Relationships between age with first stage of labor length period in Lilik maternity hospital Sidoarjo.

Chi square correlation test results showed there is a significant relationship between age old first stage of labor in Lilik maternity hospital Sidoarjo ($p = 0.013$). According Manuaba, healthy reproductive age is 20-35 years. The age factor cited as a cause and predisposing to a variety of complications in pregnancy and childbirth, among other things led to his abnormalities, placenta previa and others (Wiknjosastro, 2002). Age < 20 years and > 35 years is considered as the age range at risk for complications during pregnancy, delivery and post-partum.

Table 1 Results of bivariate analysis of factors affecting long first stage of labor

Variabel Independen	Variabel Dependen	Pearson Chi Square	P value
Age	Duration first stage	6.111	0.013
Parity	Duration first stage	4.693	0.030
Contraction	Duration first stage	22.941	0.001
Outer Pelvic size	Duration first stage	0.197	0.657
Fetus Weight interpretation	Duration first stage	0.039	0.844
skill birth attendance	Duration first stage	0.679	0.410
Anxiety level	Duration first stage	2.861	0.414

Table 2 Results of multivariate logistic regression analysis of the factors that affect the first stage of labor length period

Variabel	Interval Significan 95 %		
	Exp (B/OR)	B	Nilai p
Konstanta		-37.991	0.000
Age	6.111	36.382	0.013
Parity	4.693	18.938	0.030
Contractions	22.941	55.748	0.000
N Observasi			30
Nagelkerke			0.933
R Square			

Sumber : Data Primer, Desember 2015

Relationship between parity first stage of labor length period in maternity hospital Lilik Sidoarjo.

The results of correlation test by using chi square showed that there was a significant relationship between parity with the first stage of labor length period in maternity hospital Lilik Sidoarjo regency as evidenced by the value ($p = 0.030$). Obstructed labor often djumpai in primigravida with age > 35 years. Parity 2-3 (multigravida) is the safest in terms of maternal mortality, primigravidas donations or grandemulti deemed to have a higher maternal mortality. Prolonged labor often occurs in primigravida due to the lack of preparation in the face of labor (Wiknjastro, 2002).

Relationship between Labor contractions with the first stage of labor length period in maternity hospital Lilik Sidoarjo.

The results of correlation test by using chi square showed a significant correlation between labor contractions with the first stage labor of length period in maternity hospital Lilik Sidoarjo as evidenced by the value ($p = 0.000$). State labor contractions that push the fetus out is a very important factor in labor, which is not normal either his strength or nature can hinder the smooth delivery (Manuaba, 2001).

Relationships between outer pelvis size with the first stage of labor length period in Lilik maternity hospital Sidoarjo.

The test results by using chi square correlation showed there was no correlation between the first stage of labor length period in Lilik maternity hospital Sidoarjo as evidenced by the value ($p = 0.657$). This differs from the theory by showing that the size of the pelvis that does not conform to normal standards may lead to prolonged labor. Researchers found outside the pelvis size that do not represent the size of the pelvis in the maternity so that in this case the outer flanks size is not related to the old one stage of labor.

Relationship between interpretation of fetal weight with the first stage of labor length period in Lilik maternity hospital Sidoarjo.

The results of correlation test by using chi square showed no significant relationship between the interpretation of fetal weight with the first stage of labor length period in Lilik maternity hospital Sidoarjo as evidenced by the value ($p = 0.844$). Based on the theory of fetal magnitude of > 4000 g will lead to prolonged labor. In normal pelvis, a fetus weighing 2500 - 4000 grams is generally no difficulty in childbirth. In this study did not find the interpretation of fetal weight above 4000 g so that the results of this study states that there is no relationship between the interpretation of fetal weight with the first stage of labor length period.

Relationship between skill birth attendants with old first stage of labor length period in Lilik maternity hospital Sidoarjo.

The results of correlation test by using chi square showed no significant correlation between the helper skills and the first stage of labor labor length period in Lilik maternity hospital Sidoarjo as evidenced by the value ($p = 0.410$). Skill birth attendants is no direct influence in labor but with professional help that can provide support and early detection of complications in childbirth .

Relationship between anxiety level with the first stage of labor length period in Lilik maternity hospital Sidoarjo.

The results of correlation test by using chi square showed no significant correlation between anxiety level with the first stage of labor length period in Lilik maternity hospital Sidoarjo as evidenced by the value ($p = 0.414$). Fear mother during childbirth causes anxiety and endocrine responses that cause sodium retention, potassium excretion, and decreased glucose needed by contractions of the uterus. These responses also cause disekresinya epinephrine, which inhibits the activity of miometrial, and release norepinephrine which causes or is not coordinated uterine activity. Increased physical distress and ineffective labor causes more fear and discomfort (Hamilton, 2005). This contrasts with the results of research that has been done because researchers did not control the other psychological factors such as labor companion and others.

Relationships independent variable on the dependent variable.

Based on logistic regression statistical tests obtained related variables together on one long stage of labor is the age, parity and labor contractions. Variable having the most significant relationship was the contraction in the first stage of labor.

Based on the analysis of the value of OR = 22,941 and CI 95 %, meaning that pregnant women who contracted the delivery Inadequate 22,941 times has the opportunity to experience first stage of labor is long when compared to mothers who contractions adequate. This is in

line with the theory put forward by Manuaba (2001) that the state of his or forces that push the fetus out is a very important factor in labor, which is not normal either his strength or nature may hamper the smooth delivery.

CONCLUSION AND RECOMMENDATIONS

Variables associated together against old first stage of labor is the age, parity, and contraction. Research variables most associated is contractions. It is therefore expected his helper were able to observe exactly so they can know that the first stage of labor lasted physiological or not.

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THE RELATION BETWEEN ANTICIPATORY GUIDANCE OF SIBLING RIVALRY AND SIBLING RIVALRY ON PRESCHOOL (2-6 YEARS) IN WEST KWANYAR BANGKALAN

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ABSTRACT

Introduction : Sibling rivalry is jealousy or dislike from sister or brother that comes naturally when present new member in the family . The previous research showed that 6 children (60%) were sibling rivalry, while 4 children (40%) were not sibling rivalry. The purpose of this research is analyze the relation between anticipatory guidance of sibling rivalry and sibling rivalry on preschool in West Kwanyar Bangkalan. **Method** :The Research design was analitik correlational with cross sectional approach. Unit analysis was preschool 2-6 years who have a young sister or brother, resources was mother who has child of preschool and have sister or brother, with 37 sample. The independent variable was anticipatory guidance sibling rivalry and dependent variable was sibling rivalry. Technique of data collection were questionnaire. Statistic test used spearman rank with α (0,05). **Result and analyze** : The result of this research was more than 50% was less in anticipatory guidance of sibling rivalry (23 respondents or 62,2%), and children who had sibling rivalry were 17 respondents (45,9%). The result of spearman rank showed that P value (0,00) with α (0,05), there was mean P value $< \alpha$, so H0 was rejected and H1 was accepted, it mean there was relation between anticipatory guidance of sibling rivalry and sibling rivalry in preschool (2-6 years) in Kwanyar Barat Bangkalan. **Discuss** : The result of this research can be used as an information for parents to give insight for children particularly to do anticipatory guidance sibling rivalry to avoid sibling rivalry between old brother and young sister.

Keywords: anticipatory guidance, sibling rivalry, preschool (2-6 years)

EXCLUSIVE BREAST FEEDING PRACTICE

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ABSTRACT

Introduction: Breastfeeding is a basic human activity, vital to infant and maternal health and of immense economic value to households and societies. The WHO recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development, and health. Exclusive Breast Feeding (EBF) is defined as infant feeding with human milk without the addition of any other liquids or solids. The benefits of breast-feeding, to both mother and baby, have long been recognized. Despite strong evidences in support of EBF for the first six months of life, its prevalence has remained low worldwide and it is estimated that only about one-third of infants were exclusively breastfed for the first six months of life. **Method:** The method used database journals in PubMed, ProQuest and Cochrane that used the keywords; after the data obtained was reviewed journal research was conducted. Search result found 116 journals but in accordance with the topic was 5 journal with a span of 2015 – 2016. **Result:** breastfeeding promotion interventions in developing countries have been shown to result in a six fold increase in exclusive breastfeeding rates at six months. Educational status, age, antenatal and postnatal follow up, resident and place of delivery were predictors of suboptimal breastfeeding. Integrated and targeted interventions were recommended to achieve a better outcome in minimizing the late initiation, non-exclusive and early cessation of breastfeeding. **Conclusion:** A greater understanding of barriers to initiating and sustaining breastfeeding, some of which are socio-economic-specific, may assist in reducing inequalities in infant breast-feeding. The level of exclusive breast-feeding was low. Thus, it is important to provide prenatal education to mothers and fathers on breast-feeding. And recommend strengthening the public health education campaigns to promote exclusive breast-feeding.

Keywords: Exclusive breastfeeding, breast feeding practice

INTRODUCTION

Breastfeeding is the biological norm for the human species, and milk alternatives have the potential to negatively impact infant and maternal health. Breast-feeding is associated with positive maternal and infant health and development outcomes. Breast milk meets the infant's needs by providing nutrients appropriate to the infant's developmental stage, as well as growth factors, antimicrobial peptides, and proteins to support their developing immune system. This highlights the importance of the initial period after birth and emphasizes the need for strategies to ensure normal infant growth and development. Mother–infant contact, latching and suckling, drive human milk production and support successful breastfeeding. The benefits of

breastfeeding are well documented. In addition to providing all necessary

nutrients for the young infant's growth and development; it also confers several health advantages. World Health Organization (WHO) recommends exclusive breastfeeding for the first 6 months of life, with continued breastfeeding until the age of 2 years or more.

Globally, over one million newborn infants could be saved each year by initiating breastfeeding within the first hour of life. In developing countries alone, early initiation of breastfeeding could save as many as 1.45 million lives each year by reducing deaths mainly due to diarrheal diseases and lower respiratory tract infections in children. Under-five deaths are increasingly concentrated in Sub-Saharan Africa and Southern Asia, while

the share in the rest of the world dropped from 31 % in 1990 to 17 % in 2011. This clearly shows that over half of the MDG countries, including the above two are not on track to meet this target. To achieve the fourth MDG, infant breastfeeding has been identified as one of the major intervention areas both globally and nationally. The World Health Organization (WHO) recommend optimal breastfeeding; that newborns should have early initiation of breastfeeding within one hour after birth (timely initiation of breastfeeding), exclusive breastfeeding (defined as no water, other fluids or foods with the exception of drops or syrups consisting of vitamins, minerals supplements, or medicines for six months) and continued breastfeeding for two years or beyond with the addition of timely, adequate, safe and properly fed complementary foods. Also, breastfeeding should be on demand, as often as the child wants day and night; and bottles of pacifiers should be avoided. Currently, the global rate of exclusive breastfeeding under six months of old is 37 %. One third of children under six months of age in developing countries are exclusively breastfed and only 39 % of newborns in the developing world are put to the breast within one hour of birth. In developing countries, the lack of exclusive breastfeeding for six months and absence of breastfeeding for infants 6 to 23 months increased diarrheal disease and associated morbidity and mortality which is the second leading cause of death for under five children.

RESEARCH METHOD

The search strategy study of English language that are relevant to the topic conducted using PubMed, ProQuest and Cochrane restricted from 2015 – 2016. Key word used were exclusive breast feeding practice. Fulltext articles and abstract were reviewed to choose studies fit the criteria. criteria for inclusion in this review was exclusive breast feeding and breast feeding practice. Based on the results of

search using the keywords, it found 116 journals. The article was used as further samples are identified and presented in table 1.

DISCUSSION

According to the American Academy of Pediatrics, the World Health Organization, United Nations International Children's Emergency Fund, and the Center for Disease Control (CDC), exclusive breastfeeding is recommended for the first six months of life, followed by breastfeeding in combination with the introduction of complementary foods until at least 12 months of age, and continuation of breastfeeding for up to two years and beyond or as long as mutually desired by mother and baby. In a systematic review of over 400 individual studies, breastfeeding was associated with a range of short- and long-term health outcomes including a reduction in the risk of acute ear infections, asthma (in young children), atopic dermatitis, gastrointestinal infections, respiratory tract diseases, obesity, type 1 and 2 diabetes, childhood leukemia, sudden infant death syndrome in term infants, and necrotizing enterocolitis in preterm infants. Unfortunately, breastfeeding initiation and continuance rates in the United States are alarmingly low. According to the 2014 report card of the CDC, 79% of US babies were ever breastfed and only 41% of babies were exclusively breastfed at three months of age. While some European countries, including Portugal, Latvia, Slovenia, Switzerland, and the Czech Republic, report breastfeeding initiation rates above 95%, others perform very poorly on this indicator. The most recent European Perinatal Health Report lists Ireland as the country with the lowest breastfeeding initiation rates (54%). In addition, there is a steep drop in exclusive breastfeeding in the first few months with 19% of mothers reporting exclusive breastfeeding at three months and a further 15% practicing mixed-feeding. By six months, only 13%

of Irish mothers are still exclusively breastfeeding.

Breastfeeding is fundamental to lifelong human health. Health care organizations have a public obligation to promote health. Yet, it is well established that many traditional hospital maternity care practices undermine exclusive breastfeeding. More than 85% of US mothers entering the hospital intend to exclusively breastfeed, but only 32% of these mothers meet this goal after hospital discharge. Seventy-eight percent of US hospitals inappropriately supplement infant formula to breastfed infants. Hospital supplementation of breastfed infants is associated with delayed onset of copious milk production and shorter duration of exclusive breastfeeding. Separation of mothers and infants by using a centralized nursery not only inhibits establishment of breastfeeding but also promotes inappropriate use of formula and artificial nipples as hospital staff deal with fussy, hungry babies in the absence of their mothers. Lack of prenatal breastfeeding education leaves mothers with the impression that formula-feeding and breastfeeding are equivalent options for their infant. Without guidance and support from hospital staff during breastfeeding, mothers often give up or come to the misguided conclusion that they or their infants cannot breastfeed. Recognizing the impact these and other hospital practices have on breastfeeding, UNICEF and the WHO developed the 10 steps to successful breastfeeding. By reforming maternity care practices through the implementation of these 10 steps, breastfeeding rates have more than doubled in participating facilities. Having a written breastfeeding policy, training the staff to assist patients with breastfeeding, keeping mothers and babies together continuously from birth, eliminating inappropriate use of formula and artificial nipples, encouraging cue-

based unrestricted breastfeeding, and ensuring continued support for the breastfeeding mother after discharge transform maternity care to allow the establishment of successful breastfeeding.

Breastfeeding has declined worldwide in recent years, as a result of urbanization and maternal employment outside the home. Studies in India have also shown a decline in breastfeeding trends, especially in urban areas. Early initiation of breastfeeding is not seen in over 75% of the nation's children and over 50% of children are not exclusively breastfed. Hence, the low figures for early initiation of breastfeeding in India are a matter of urgent concern. Although, the practice of breast feeding is influenced by various social, cultural and religious beliefs, maternal infant feeding attitude has been shown to be a stronger independent predictor of breastfeeding initiation. In addition, maternal positive attitudes toward breastfeeding are associated with continuing to be breastfeeding longer and have a greater chance of success. On contrary, negative attitudes of women toward breastfeeding is considered to be a major barrier to initiate and continue to breastfeeding.

CONCLUSION

A greater understanding of barriers to initiating and sustaining breastfeeding, some of which are socio-economic-specific, may assist in reducing inequalities in infant breast-feeding. The level of exclusive breast-feeding was low. Thus, it is important to provide prenatal education to mothers and fathers on breast-feeding. And recommend strengthening the public health education campaigns to promote exclusive breast-feeding.

Continuous advocating of exclusive breastfeeding and early initiation of breastfeeding by the health care providers

Table 1

Title	Author/ year	Design	Population and sample	Intervention	Control	Random	Outcome	Result
Knowledge, attitudes, and breast feeding practices of postnatal mothers: A cross sectional survey	Poreddi Vijayalakshmi, Susheela T, Mythili D/ 2015	Review information	postnatal mothers at Pediatric outpatient department at a tertiary care center	No	No	Yes	postnatal mothers	most of the mothers (88.5%) were breastfeeding their infants, merely 27% of the mothers were exclusive breast feeders and 36.9% initiated breastfeeding within an hour of delivery
The Influence of Early Infant-Feeding Practices on the Intestinal Microbiome and Body Composition in Infants	Aifric o'sullivan, Marie Farver and Jennifer t. smilowitz / 2015	Review information	postnatal mothers	No	No	No	postnatal mothers	obesity risk and duration of exclusive breastfeeding consistently report a protective effect when formula is delayed
High education	Natalie Holowko,	Prospective	Parous women	No	No	No	women	Women with a

n and increase in parity are associated with breast-feeding initiation and duration among Australian women	Mark Jones, Ilona Koupil, Leigh Tooth and Gita Mishra/ 2016	cohort study	from the Australian Longitudinal Study on Women's Health				breast-fed their first, second and third child for at least 6 months	low education or a very low-educated parent had increased odds of not initiating breast-feeding with their first or subsequent children. While fewer women initiated breast-feeding with their youngest child, this was most pronounced among high-educated women.
Determinants of suboptimal breastfeeding practice in Debre Berhan town, Ethiopia	Teklemariam Gultie and Girum Sebsibie/ 2016	cross sectional study	women breast-fed	No	No	No	women breast-fed	The prevalence of late initiation of breastfeeding, not exclusively

:									breastfeeding and early cessation of breastfeeding were respectively
Determinants of Breastfeeding Practice and Success in a Multi-Ethnic Asian Population	Wei Pang, PhD, Izzuddin M. Aris, Doris Fok/ 2016	Wei Aris, PhD, 2016	Review information	women recruited during early pregnancy	No	No	No	women breast-fed	Duration of any and full breastfeeding were positively associated with breastfeeding a few hours after birth, higher maternal age and education, and negatively associated with irregular breastfeeding frequency and being shown how to breastfeed. Adjusting for maternal

education, breastfeeding duration was similar in the three ethnic groups, but ethnicity remained a significant predictor of mode of breastfeeding.

and through different media is important. Health education should be provided to enable the mother to accept behavioral changes towards timely initiation, exclusive breastfeeding and timely weaning of breastfeeding. Preferably as health workers should be able to provide health education on exclusive breastfeeding, so as to improve the achievement of exclusive breastfeeding.

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DETERMINANTS OF EXCLUSIVE BREASTFEEDING FOR INFANT 0-3 MONTHS OLD IN BLIMBING GUDO PRIMARY HEALTH CENTER

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ABSTRACT

Background: Infant mortality rate is a problem in Indonesia. The improvement of breastfeeding practice is one of key factors that gives contribute to lower infant mortality rate. Therefore, we have to decrease infant mortality rate by increasing community's nutritional status using breastfeeding program continuously. This study aimed at identifying major determinants of exclusive breastfeeding practice in Blimbing Gudo, Jombang. **Method:** This study was an analytical study with cross-sectional design in a sample of 58 mothers from May to June 2015. The instrument used for evaluation a questionnaire which have been proven its validity and reliability. Data analysis using chi-square and fisher exact test if it doesn't meet the requirements for chi-square test. **Results:** Most of respondents gave formula to infants at an early age due to the role of midwives as birth attendants are pushing to give formula. Factors examined in this study include maternal attitude, education, occupation, parity, income and infant. Based on the analysis in getting the chi square test, overall factors studied showed that maternal attitudes factor is a major factor in breastfeeding practice, χ^2 value count = 8.929 > χ^2 table; $p = 0.003 < \alpha (0.05)$. **Conclusion:** The major determinants of exclusive breastfeeding practice in Blimbing Gudo, Jombang is maternal attitudes. A positive attitude is owned by someone, especially mothers in breastfeeding becomes a powerful predictor in exclusive breastfeeding.

Keyword: Determinants, Exclusive Breastfeeding

INTRODUCTION

The infant mortality rate can be reduced by the effort to improve the communities nutrition through exclusive breastfeeding (Laksono, 2012). The exclusive breastfeeding given from birth to 6 months and continued until 2 years old as recommended by the World Health Organization (WHO), as known can decrease the incident of malnutrition in infants and young children (UNICEF, 2002). The benefits of breastfeeding for infants include: protect the baby from infection, increase endurance baby, forming a healthy digestive system, and improve intelligence. Based on the review Entwistle, Kendall, (2010) to several studies that breast milk is not only beneficial to the health of the baby, but also for the mother and the country. The benefits for the mother that help to lose weight, helps the uterus return to normal size more quickly and prevent bleeding, prevent breast cancer as well as a natural contraceptive method. The benefits for

the country are to get a Human Resources (HR) quality, foreign exchange savings for the purchase of infant formula, as well as reduce subsidies for sick children and pharmaceuticals.

Various studies have shown the importance of breastfeeding, but the scope of exclusive breastfeeding has not been satisfactory. Exclusive breastfeeding in Indonesia in 2010 in infants 0 months was 39.8%. In infants aged 1 month of 32.5%, infants aged 2 months 30.7% of infants aged 3 months of 25.2%, a baby 4 months by 26% and infants aged 5 months amounted to 15.3% (Riskasdas, 2010), The data showed a decline in breastfeeding exclusive with age infants

In East Java, the scope of exclusive breastfeeding in 2012 was 71,87%, while in 2013 decreased to 63,8%. These numbers getting further away from the national target that is 80%. Just as happened in East Java, the scope of exclusive breastfeeding in Jombang was decreased. In 2013, he scope of exclusive

breastfeeding in Jombang was 79,42% and in 2014 decreased to 76,91% (Dinkes Kabupaten Jombang, 2014). The low exclusive breastfeeding can be caused by various factors such as the mother, the baby and the environment. Based on the review Entwisted, Kendall, Mead (2010) to several studies those maternal factors to breastfeeding among other experiences, socioeconomic status, mother's attitude, support of health care provider, as well as self-confidence for breastfeeding mothers.

A breastfeeding mothers need adequate preparation to face the lactation period in order to breastfeed. Therefore, pregnant women need to get enough information about prenatal care, the benefits of breastfeeding, the introduction of appropriate weaning techniques, as well as solutions for working mothers to afford the needs of breastfeeding to her baby. Generally all these things summed up in a lactation program that is run by the government to support exclusive breastfeeding. The government made a series of efforts that must be made on an ongoing basis by all Indonesian people. This government effort embodied in the form of program 10 Steps to Successful Breastfeeding (LMKM). Implementation of 10 Steps to Successful Breastfeeding are 1) make a written policy on breastfeeding and communicated to the staff of the health service; 2) to train all staff in the service of skill implement breastfeeding policy; 3) inform all pregnant women about the benefits and management of breastfeeding; 4) help mothers breastfeeding in the first 60 minutes of labor; 5) helps mothers how to breastfeed and maintain lactation even though the mother is separated from her baby; 6) give only breast milk to newborns unless medically indicated; 7) apply rooming mother with her baby all the time (24 hours); 8) recommends breastfeeding babies on demand; 9) give no pacifier to the baby; 10) encourages the establishment of breastfeeding support groups and refer mothers to them after coming out of the health care facilities (Ministry of Health of Health, 2010).

Public Health Cener (PHC) Blimbing Gudo is one PHC in Jombang that promotes maternal and child health services. With the implementation of the program it is expected to improve the achievement of exclusive breastfeeding in PHC Blimbing Gudo. However, according to a preliminary study

conducted by researchers at the working area PHC Blimbing Gudo, the four people who were divided into two groups: 2 midwives and 2 nursing mothers. Results of a preliminary study in March 2015 researchers at the PHC Blimbing Gudo, 2 midwives informed that there are still women who provide a baby formula if the breastfeeding has not come out or the baby kept crying. Breastfeeding ccounseling becomes into active service has been carried out with the support of breastfeeding rooms and have an attendant lactation counselors who have been trained and taught the techniques of breastfeeding on postpartum mother.

The result of interviews with two nursing mothers informed that the health center has been taught how to breastfeed and inform the family not to give their babies formula. But the mother plans to give formula to their babies for reasons not confident that the breastfeeding will meet the needs of the baby. Another reason given by the nursing mother is time off from work that has been completed so that the mother did not have much time to breastfeed her baby. Therefore, researcher interested in conducting further research on the determinants of exclusive breastfeeding for infant 0-3 months old.

RESEARCH METHOD

This study was an analytic research using cross sectional approach. The data collection on the independent variable is the factors affecting breast-feeding dependent variable is the exclusive breastfeeding in infants aged 0-3 months. Study started from May to June 2015. The population in this research is all mothers with infants aged 0-3 months in PHC Blimbing Gudo with total of 105 mothers. The sample in this study obtained a sample size is 58 mothers. The inclusion crieria in this study were mothers with infants aged 0-3 months; women who have or are breast-feeding; women who birth in health facilities PHC Blimbing Gudo; mother healthy body and mind; mothers who are willing to be a respondents. The exclusion criteria in this study were as follows: mothers whose babies suffered a stillbirth & Mothers who have rejected the respondent.

RESULTS

In this section the respondents practice in breastfeeding research analyzed of age, education, occupation, parity, income and attitude. Variables that do not qualify *chi square* test, conducted the analysis using fisher exact test. The test results can be seen in detail in Table 1

Table 1. Determinants of Exclusive Breastfeeding for Infant 0-3 Months Old at Blimbing Gudo PHC June 2015

Variable	Breastfeeding practice				P value (chi square)
	Non ASI		ASI exclusive		
	n	%	n	%	
Mother's age					
< 20 years	2	20,	8	80,	0,287*
20 – 35 years	2	0	2	0	
	1	43,	7	56,	
		8		2	
Education					
Low	7	41,	1	58,	0,879
High	1	2	0	8	
	6	39,	2	61,	
		0	5	0	
Occupation					
None/HW	1	38,	1	61,	0,867
Working	0	5	6	5	
	1	40,	1	59,	
	3	6	9	4	
Parity					
> 1 times	1	39,	1	60,	0,956
1 time	1	3	7	7	
	1	40,	1	60,	
	2	0	8	0	
Income					
Low	1	33,	2	66,	0,159
High	3	3	6	7	
	1	52,	9	47,	
	0	6		4	
infant's Age					
1 Month	9	42,	1	57,	0,698
2 Months	8	9	2	1	
3 Months	6	33,	1	66,	
		3	6	7	
		46,	7	53,	

Table 1 Frequency Distribution Answer Question Attitude Respondents by Item of Breastfeeding

Statement	strongly disagree		disagree		agree		strongly agree	
	f	%	f	%	f	%	f	%
	Formula should be given immediately after birth if the breast milk has not come out.	12	41,4	12	41,4	5	17,2	0

Variable	Breastfeeding practice				P value (chi square)
	Non ASI		ASI exclusive		
	n	%	n	%	
Mother's attitude	2		8		0,003
Positive	8	23,	2	76,	
Negative	1	5	6	5	
	5	62,	9	37,	
		5		5	

* fisher exact test

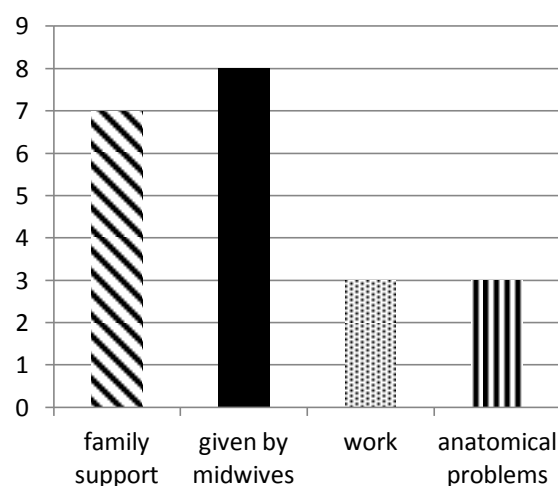


Figure 1. Reason Giving prelacteal drink / food In addition to breast milk in Infants Age 0-3 Months in Blimbing Gudo PHC June 2015

Concluded there was no difference between the practice of exclusive breastfeeding in mothers based on age, education, occupation, parity, income and age of the infant. But when viewed from the aspect of mother's attitude differences were found breastfeeding practices.

Table 2 describes in detail the answers of respondents by item questions the attitude of the mother in breastfeeding infants aged 0-3 months.

Work is not a hindrance to give breast milk to the baby.	2	6,9	12	41,4	15	51,7	0	0
I will give only breast milk until 6 months.	0	0	8	27,6	17	58,6	4	13,8
More often breastfeed, more milk out.	5	17,2	15	51,7	9	31,0	0	0
Breast milk can be pumped and given to babies when their mothers go	1	3,4	22	75,9	6	20,7	0	0
Breast milk is not good to use after a heated first.	0	0	3	10,3	22	75,9	4	13,8
Healthy infants 0-6 months of age should be given formula milk for the nutritional needs of infants.	3	10,3	21	72,4	5	17,2	0	0
Nursing positions will affect milk production is out.	4	13,8	12	41,4	12	41,4	1	3,4
Infant before 6 months of age should not be given solid foods such as bananas, baby food, fruit,.	0	0	13	44,8	13	44,8	3	10,3

In the group of non exclusive subsequently studied type of food or drink given before the baby is 6 months old and explained that the formula milk and honey is the kind of drink other than breast milk given to infants before 6 months of age. A total of 21 of 26 mothers (80.7%) give formula instead of breast milk. The majority of respondents give a prelacteal drink / food in addition to breastfeeding infants at an early age due to the role of midwives as birth attendants are pushing to give formula in meeting the nutritional needs of the newborn.

CONCLUSION

From the research that has been carried out on May 25 - June 25, 2015 in Blimbing Gudo PHC can be summed up as that major determinants of exclusive breastfeeding practice in Blimbing Gudo, Jombang is maternal attitudes. Maternal attitude in exclusive breastfeeding will impact the endocrine system that will affect the child's emotional development. So that children who are not breastfed tend to be more at risk of developing depression and other emotional problems. Attitude can be used to predict the behavior will occur. With such an attitude can be interpreted as a behavioral predisposition to come. A positive attitude is owned by someone, especially mothers in breastfeeding becomes a powerful predictor in exclusive breastfeeding. A positive attitude to mothers with infant growth and development priority should be applied in the practice of breastfeeding that is expected to improve the health of mothers and children, especially in reducing the infant mortality rate.

Practice Independent Midwives as a means of health services for mothers and children should be able to apply breastfeeding program and set aside the award given by the formula manufacturer. The public especially breastfeed mothers are expected giving more breastfeeding in infants and behavioral changes that changing habits are less precise in the breastfeeding process in a way trying to find information about breastfeeding or breast milk following the Support Group.

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YOGA EXERCISE REDUCING DISMENORRHEA PAIN LEVEL OF TEENAGER

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ABSTRACT

Introduction: When women have menstruation, there will be contractions that cause pain or discomfort on the part of the body, especially the abdomen, called dysmenorrhea. However, some women experience it until affects the discomfort in doing activities, which can disturb the productivity. The aim of this research is to find the princess disminorhea pain in the excercise before and after doing yoga in teenage girls at RT. 09 RW. 04 the village of Bligo district of Candi Sidoarjo. **Methods:** The research design was pre-experimental design with one group pre-post test design. Population of this research were all teenager at RT. 09 RW. 04 the village of Bligo district of Candi Sidoarjo. Samples were teenagers who experience dysmenorrhea. The amount of sample were 9 respondents using purposive sampling technique. The dependent was dysmenorrhea and the independent variable was yoga exercise. The research instruments using SOP, the data were analyzed by T-Test paired samples. **Result:** Results showed pain before doing yoga exercises gained an average pain level was 6.44 (severe pain), and after doing yoga exercises average pain level was 4,11 (moderate pain). T-Test samples obtained $p = 0.000 < \alpha = 0.05$, H_0 is rejected means there is dysmenorrhea difference on teenage girls before and after doing yoga exercise at RT. 09 RW. 04 the village of Bligo district of Candi Sidoarjo. **Discussion:** The conclusions of this research is yoga exercise regularly will help in doing activities and daily routines without interruption of menstrual pain. Midwives are expected to make yoga exercise as one of non-pharmacologic treatment to teenagers who experience dysmenorrhea.

Key words : Teenagers, Yoga Excercise, Dysmenorhea

INTRODUCTION

Painful menstruation gynecological complaints or Dysmenorhea is most common in women. Who complained of symptoms such as cramping in the lower abdomen, dizziness, nausea, shaking and unconscious. This pain occurs due to various physical and psychological factors (Andrews, 2009). Of weakness, lack of exercise and stress. However, there are some women in the reproductive age who are experiencing pain Dysmenorhea, and most women experience discomfort to affect the activity academic, social and sport-related absenteeism in the school or in the workplace, so that it can interfere with productivity.

Menstrual pain is divided into 2 primary menstrual pain and menstrual pain secondary. Primary dysmenorrhea is defined as recurrent cramping pain that occurs during menstruation without any pathological abnormalities in the

pelvis. Secondary menstrual pain is pain during menstruation that is based on pathologic abnormalities in the pelvis, eg endometriosis (Bobak, 2010). In Indonesia the incidence Dysmenorhea consists of 54.86% and 9.36% of primary Dysmenorhea Dysmenorhea secondary primary Dysmenorhea symptoms usually occur in women of childbearing age 3-5 years after experiencing first menstruation and women who had never been pregnant. There are no exact figures regarding menstrual pain sufferers in Indonesia, but in Surabaya gained 1.07% to 1.31% of the number of patients at the health center came gets obstetrics area (Ningsih, 2011).

Results of a preliminary study conducted by researchers at the date of October 10, 2014 through interviews at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo, found the number of young women who experience menstrual pain is as much as 8

people, with a prevalence of 2 (25 %) complained of pain occurs only for a moment and to recover. The pain can disappear by itself without the need for medication, headache, backache, and pain does not interfere with daily activities, 5 (62,5 %) complained of need medication for pain relief, but the pain can still be in control, dizziness, nausea, back pain does not have to abandon their activities, and one person (12,5 %) complained of severe pain, dizziness punggang pain, leg cramps, vomiting, until unconscious and unable to perform daily activities and require bed rest at girls who experiencing menstrual pain at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo

Dismenorhea pain is influenced by several factors including: psychological factors, risk factors, obtruksi cervical canal and endocrine factors. Dismenorhea arise due to contraction of the myometrium disritmik which displays one or more symptoms of pain ranging from mild to severe pain in the lower abdomen, buttocks and spasmodic pain on the medial side of the thigh. Thus forcing the patient to take a break and leave work or a way of daily life, for a few hours or a few days (Prawirohardjo, 2009). Dismenorhea make a woman can not be normal activity and requires a prescription, to relieve pain Dismenorhea can be done by means of pharmacological and nonpharmacological. Controlling pain with pharmacological among others with analgesic inhalation, analgesic apioid, and regional anesthesia, whereas pain control nonfarmakologi among others: physical exercise, brisk walking, jogging, swimming, running, gymnastics, yoga, bike distance, taking care of home, warm compresses Massase , adequate rest and diet changes to reduce salt and gymnastics, yoga is one method that can nonfarmakologi deterapkan to reduce the intensity of Dismenorhea (Andrews, 2009).

Gymnastics yoga is a form of relaxation that is highly recommended . The purpose of yoga exercises is to reduce Dismenorhea experienced by some women each month (Guyton, 2007). It is caused when doing sports or exercise, the body will produce endorphins. Endorphins produced by the brain and spinal cord. This hormone acts as a natural sedative that is produced by the brain, causing a sense of comfort (Baziat, 2008). At an athlete who regularly exercise have Dismenorhea

prevalence rate lower than that of women who are obese, and in women who have irregular menstrual cycles (Anugroho , 2011).

From the description above, the researcher is interested in conducting research on the effect of yoga exercises with the level of menstrual pain in adolescent girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo.

METHOD

The research design is quasi-experimental research with one group pre-test and post- test design .

The population is all the young women in RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo in October 2014 amounting to 10 people . Samples taken by purposive sampling studies met the inclusion criteria, namely the young women who experience menstrual pain at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo in October 2014 in the amount of 9 people.

The dependent variable in this study is the level of menstrual pain and the independent variable is the yoga exercises. The research instrument uses observation sheets and SOP, data were analyzed by T - Test paired samples.

RESULT

The research was carried out at RT. 09 RW. 04 Village Bligo Candi region that is located in the Sidoarjo. Bligo village easily accessible by the public and can be reached by foot or by vehicle . Restrictions RT. 09 RW. 04 Bligo village borders the following regions namely the north bordering the Larangan village, the east by RT. 10 and south by RT. 13 and west borders with RT. 08 Village Bligo.

Characteristics of respondents by age

Table 1 The frequency distribution of respondents according to age at RT. 09 RW. 04 Village Bligo Sidoarjo Candi region in October 2014 .

Age (years)	Frequency (n)	Percentage (%)
10-13	1	11,1
14-16	1	11,1
17-20	7	77,8
Total	9	100

In table 1 we can see that from 9 respondents nearly all respondents (77.8 %) aged 17-20 years.

Characteristics of respondents by education level

Table 2 The frequency distribution of respondents by education at RT . 09 RW . 04 Village Bligo Sidoarjo Candi region in October 2014.

Education Level	Frequency (n)	Percentage (%)
Basic	1	11,1
Intermediate	6	66,6
High	2	22,2
Total	9	100

In table 2 it can be seen that from 9 respondents most respondents (66.6 %) level of secondary education.

Characteristics of respondents based on family history of primary Dismenorhea

Table 3 The frequency distribution based on family history of primary Dismenorhea / descent at RT . 09 RW . 04 Village Bligo District of Candi Sidoarjo October 2014

History Dismenorhea	Frequency (n)	Percentage (%)
Yes	6	66,6
No	3	33,4
Total	9	100

In table 3 it can be seen that out of nine respondents most respondents (66,6 %) had a family history of primary dysmenorrhoea / descent.

Results showed pain before doing yoga exercises figures obtained average pain level was 6,44 (severe pain), and after doing yoga exercises was 4,11 (moderate pain). Statistical test results Paired samples t test p value = 0,000 < α = 0,05, statistical hypothesis H0 is rejected, which means there are differences disminorhea pain in teenage girl before and after doing yoga at RT. 09 RW. 04 Village of Bligo District of Candi Sidoarjo.

DISCUSSION

1. The level of pain before yoga exercises

The level of pain before doing yoga exercises showed that out of nine respondents experiencing menstrual pain obtained an average value of 6,44 level of pain is severe pain, with a standard deviation of 2,12 and the lowest score was 3 (mild pain), the highest score is 9 (severe pain). Pain is a personal experience, subjective differ from one to the other person and may also differ in the same person at different times (Benson, 2008). They experience symptoms such as severe pain, dizziness, punggung pain, leg cramps, vomiting, unconscious.

Based on the theory advanced by (Andrews, 2009) Controlling pain with pharmacological among others with analgesic inhalation, analgesic opioid, and regional anesthesia, whereas pain control nonfarmakologi among others: physical exercise, brisk walking, jogging, swimming, running, gymnastics, yoga, distance bicycle, take care of home, warm compresses Massase, adequate rest and diet changes to reduce salt and gymnastics, yoga is one method that can nonfarmakologi diterapkan to reduce the intensity Dismenorhea. The community effort or habits of young women in the village RW.04 RT.09 Bligo Candi region in nonpharmacologic pain control is that they have done so far has been appropriate, but worth noting if they underwent secondary Dismenorhea.

Based on Table 1 showed that respondents who have seen the pain of age almost entirely (77,8%) aged 17-20 years. At this age is an age that usually arise painful menstruation start 2-3 years after menarche and reaches a maximum between the ages of 15-25 years (Morgan, 2009). Besides, it is also supported by the psychological factors which adolescents who are emotionally unstable, if not can be lighted on the process of menstruation easily arise Dismenorhea. According Proverawati (2009) emotional stress that can aggravate the pain, but it is also the existence of risk factors such as anemia, chronic disease that can affect the incidence Dismenorhea because it can lower the body's resistance to pain.

Judging from the age factor percentage occurrence of menstrual pain more common in respondents aged ≤ 20 years, this fact in accordance with the statement of Morgan (2009) that menstrual pain often occurs at a young age, because it has not yet reached maturity biology (especially reproductive

namely endometrial growth are still not perfect), psychological and social. With increasing age, the pain will decrease.

Based on table 2 the vast majority (66,6%) of respondents in this study secondary education, which is experiencing severe pain in menstrual pain, this is because the density of activity that causes their pain levels were increased. However, knowledge of treatment of dysmenorrhoea in both categories. In such circumstances it appears that, even high girls education, the level of knowledge will be better. With knowledge about menstrual pain, the teenage girls in at RT. 09 RW. 04 Village Bligo Sidoarjo Candi region can develop the ability to take the decision to deal with menstrual pain that is a manifestation of the integration of scientific and ethical reasoning which departed from dysmenorrhoea as real problems experienced by young women. This is consistent with the theory Bobak (2010) which states that the higher the level of education can affect a person's level of knowledge.

Higher education, the resources, the experience and the attitude also will be many and varied. Experiences, attitudes affect how female behavior in dealing with events that happened Dismenorhea can also be used as a way to increase one's knowledge of a matter. Besides higher education will also affect the power of perception and mindset of someone. The higher the level of education is growing well as a source of information, of perception and thought patterns, so that the knowledge gained also in overcoming the better when he found painful menstruation.

Menstrual pain in adolescents is also influenced by the history of the birth mother or sister who experience menstrual pain / Descent, it is on show in table 3 of 9 respondents that most respondents (66,6%) primary Dismenorhea on family history. Family history can identify someone with a higher risk of experiencing a disease that often occurs. By knowing a family history of disease, a person can do to prevent and decrease the risk for experiencing a particular disease because of family history is very influential on the health condition of a family member itself and is a risk factor that is very supportive of a disease that is common in the environment of the family.

According to the theory Guyton (2007) that family history and genetic related to the

occurrence of severe menstrual pain. As with endometriosis are influenced by genetic factors, women who have a mother or sister with endometriosis have a greater risk of developing the disease as well. This was caused by an abnormal gene that is passed down in the female body (Potter, 2005).

2. The level of pain after yoga exercises

Pain after doing yoga exercises showed that out of nine respondents experiencing menstrual pain obtained an average value of 4,11 level of pain (moderate pain), with a standard deviation of 2,61. In accordance with the opinion of Ningsih (2011) one of the relaxation techniques. There are three things required in relaxation that is a quiet neighborhood, the exact position of mind rest, respondents who experienced a decrease in pain level is completely in accordance with the criteria of researchers which adolescents do not consume the herbs and not taking analgesics, so do gymnastics yoga can reduce pain.

Judging from the age factor percentage of the level of severe menstrual pain occurs in respondents aged ≤ 20 years, the fact that according to the statement Morgan (2009) that menstrual pain often occurs in young women, because it has not reached biological maturity. Additionally supported by the educational factors which can influence the activity patterns, thought patterns and emotional on them. The pattern of activity in those who are highly educated tend to be more crowded, hectic schedules that can cause fatigue and decreased endurance. According to (Prasetyo, 2010) fatigue and decreased endurance one can increase the sensation of pain felt and may reduce the ability of individual coping.

Every woman should begin employment health check or come to the place of health services as soon as possible if there is excessive pain during menstruation. To avoid complications more severe menstrual pain incidence in at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo. It can be used as a reference and knowledge that from menstrual pain that is not treated immediately adversely affect the reproductive organs, one of which can cause sterility (Agustianingsih, 2010).

In the process of this study, researchers encountered resistance from interference at the time of research and time doing yoga exercises are families who disrupt the activities which could affect the study . Because in doing yoga

exercises needed a calm and comfortable sleeping position correct and mind to rest or quiet .

3. The difference in the level of pain before and after yoga exercises

Results of research conducted by using SPSS 17,0 program paired sample t test showed $p = 0,000$, while $\alpha = 0,05$, which means that $p = (0,000) < \alpha = (0,05)$ H0 is rejected or no difference in pain disminorhea young women before and after doing yoga exercises in other words yoga exercise influence to decrease the level of pain. From 9 respondent before doing yoga exercises obtained average value is 6,44 degree of pain (severe pain) with a standard deviation of 2,12 while after doing yoga exercise value of the average pain level was 4,11 (moderate pain) with values standard deviation of 2,61.

This shows the before and after doing yoga exercise control or divert influential in pain. Where at the time of treatment to yoga exercises should be supported with a quiet environment, try to keep your mind calm and relaxed, comfortable position. But there is one respondent who declined only 1 point on a pain scale categorized moderate pain and 2 respondents who experienced severe pain where 1 point decrease in fixed categories that mean the difference before and after treatment. In this case in accordance with the theory of Ningsih (2011) that yoga exercise is an effective method, especially in the respondents who experienced mild or moderate pain.

According to research institutions in the book the basics of research methodology in 2010 said that the threat to the experimental research is more influenced by the researcher's ability to maintain the condition to remain constant during the experiment is running, this might be due to several factors which influence throughout the intervention or behavior such as compliance respondents in doing yoga exercises needed a quiet environment , the mind rest, respondents who did not drink herbs and respondents who were not taking medication from a doctor.

CONCLUSIONS AND RECOMENDATION

Conclusions

Based on the results of research and discussion on the effectiveness of yoga

exercises against menstrual pain level on RT.09 RW.04 girls in the village of Candi Sidoarjo Bligo can be concluded that:

1. Teenage girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo before doing yoga exercise with pain Dismenorhea almost half the level of severe pain.
2. Teenage girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo after doing yoga exercise with pain Dismenorhea almost half the level of moderate pain.
3. There is a difference disminorhea pain level before and after doing yoga exercise in adolescent girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo.

Recomendation

1. For the next writer

This study is basic research that can be developed into more specific research more about the differences in the level of pain in adolescents Dismenorhea to include confounding factors (age, psychological factors, factors obtruksi cervical canal, the risk factors and endocrine factors) that could affect the results, so that research results can be avoided. Further research can be done based on the research is about giving actions other than yoga exercises to decrease pain level Dismenorhea in adolescents.

2. Educational institutions

With the growing knowledge about Dismenorhea events experienced by adolescents so that research results can be used as a supporting theories that already exist and only need apply

3. For health professionals

a. Suggested for health workers are expected to apply yoga exercises as one of the non-pharmacological treatment to adolescents who experience Dismenorhea.

b. It is suggested in order to provide counseling and information in accordance with the level of education and knowledge in order to more easily understand about the incident Dismenorhea and can give management a balanced diet in the form of counseling, psychological, gymnastics, yoga, and exercise regularly.

4. For teens themselves

This research can be used as information that yoga exercises can reduce pain

Dismenorhea. And it is also important for writers, especially women who experience Dismenorhea to immediately consult a health employment in an effort to detect the cause of primary or secondary Dismenorhea through the provision of counseling therapy and management of the underlying cause.

5. For young women with secondary Dismenorhea

This research can be used as the basis of information Dismenorhea nonpharmacologic pain control that movement yoga exercises may be done by people with secondary Dismenorhea because yoga exercise procedures do not affect the health or worsen the situation for young women who have secondary Dismenorhea.

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MONOSODIUM GLUTAMATE EFFECT ON WOMEN WEIGHT GAIN AND REPRODUCTIVE ORGAN

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ABSTRACT

Introduction: Monosodium glutamate (MSG) is widely used as food preservative. Asian countries are the major user among all to use this kind of additives despite of many debates among the safety of MSG for human consumptions. Natural MSG was found in foods with high protein, sea product, and vegetables. **Method:** Articles search via Google Scholar, and Sage Publication database. The search was not limited to English language but no article in bahasa Indonesia was found. **Results:** Research about weight gain and Body Mass Index (BMI) in human after MSG intake show contrary results. There were some studies that suggested body weight gain and BMI but some studies didn't suggested. Research about genotoxicity of MSG mostly conducted on experimental animal. **Discussion:** This review reveal that even though there were evidence that MSG produce negative effect such as weight gain, cell inflammation, damage of reproductive organ in female animal samples, no generalized conclusion published to provide necessities of MSG prohibition in human foods.

Keywords: monosodium glutamate, weight gain, BMI, genotoxicity

INTRODUCTION

Monosodium glutamate (MSG) has been a debate in our society. Other than additive substance, MSG was found in natural product especially foods with high protein such as meat, and fish. It also occurs in vegetables like tomatoes, and mushrooms, and sea product such as seaweed (EUFIC 2002). Many people, even health workers believe that the use of MSG in food is consider being bad for our health. Study of MSG is a very active research than research of any other additives for food. Most nurses suggest their patients including women patients to avoid food containing MSG in their diet. Their explanation are MSG can produce bad effect for health as general and triggers cancers especially cancer in reproductive system. United States Food and Drug Administration (FDA) and European Food and Information Council (EUFIC) recommended that MSG use in food is safe according to researches. Despite the recommendation, scientist in Europe request the European Food Safety Authority (EFSA) to provide scientific prove of MSG safety since there were changes in MSG production method (EFSA 2015). In Indonesia Badan Pengawasan

Obat dan Makanan (BPOM), food and drug agency of Indonesia has press released that the use MSG as food additives is safe (Esy and Rie 2009). Thus the correlation between monosodium glutamate intake and women's health remain unclear.

METHODS

Articles searches conducted electronically via Google Scholar, and Sage Publication database. The search was not limited to English language articles but no article in Bahasa Indonesia was found. Keywords used were monosodium glutamate, l-glutamine, and women's health. The search yielded 311 articles, 25 were matched with the criteria and 12 of them were reviewed in this paper.

RESULTS

MSG is widely use, not only in Asian countries such as Japan and China but also in other continents like Europe, America, and Australia (Hien VuThiThu 2013). It added to foods and produces a flavoring called

“umami”. This flavor was explained as savory taste or meat like taste (EUFIC 2002). This so called umami taste according to a research in women found that obese women comparing to normal weight women have increase in MSG detection thresholds. Obese women prefer a high concentration of MSG than normal weight women (Pepino 2010). An INTERMAP study about association on MSG intake and overweight in Chinese adults suggest that women had slightly lower MSG intake than man. The research included 48.7% women as samples found that MSG user had higher body mass index (BMI) and likely to get overweight than MSG non-user (He 2008). A study on elderly also found MSG increase energy intake, body weight and BMI (Bautista et al. 2013). MSG alone decreased blood triglyceride and total cholesterol (T-CHOL) levels. MSG in combination with Aspartam (ASP) elevated body weight, and caused a further increase in fasting blood glucose compared to Controls (prediabetic levels); together with evidence of insulin resistance during the insulin tolerance test (ITT) (Kate S Collison 2012). On contrary, a study also on Chinese adult population found that MSG intake was not associated with weight gain when the results was adjusted for age, sex, multiple lifestyle factors and energy intake (Zumin Shi 2010). Another study in women recommended that the addition of MSG to chicken broth did not increase energy intake or affect motivational consumption of the next meal (Carter et al. 2011). One study suggested that MSG intake did not increase Hemoglobin level in women with normal body weight (Shi et al. 2013).

Many believe that MSG produce genotoxicity effect on human organ, a lot of research conducted using experimental animals to reveal this suspicion. A research about the effect of vitamin C administration on monosodium glutamate induced liver injury proposed Light microscopic examination of the liver on rats given MSG alone shows increased number of vacuoles and inflammatory cellular infiltration with small fragmented pycnotic nuclei that were more abundant around the central vein of hepatocytes. These damages show less in group with the combination of MSG and vitamin C (El-Meghawry El-Kenawy et al. 2013). Activity of glucose-6-phosphatase in the liver and kidneys rats increase after intraperitoneal MSG and significantly cause micronucleated polychromatic erythrocytes

(MNPCEs) formation. Administration of vitamin C and quercetin on experimental rats on this study inhibit MNPCEs induction (Farombi and Onyema 2006). An experiments in 2 group of female wistar rats given 0.04mg/kg and 0.08mg/kg of MSG thoroughly mixed with the growers’ mash showed fallopian tube cellular hypertrophy, degenerative and atrophic changes, and lysed red blood cells in lumen. These condition was severe in group given 0.08mg/kg of MSG. It is suggested that MSG may have some deleterious effects on the fallopian tubes of adult female Wistar rats at higher doses of MSG (Eweka et al. 2010). Other study in female wistar rats also proposed the histopathological evaluation of the tissues of the ovary showed Infiltration of inflammatory cells in and around the oocyte as well as in the zonal granulosa layer and there was distortion of tissue architecture after oral administration of MSG (Ilegbedion et al. 2013). An in vitro experiment of human lymphocytes investigate the genotoxic potential of MSG by using chromosome aberrations (CAs), sister-chromatid exchanges (SCEs), cytokinesis-blocked micronucleus (CBMN), and random amplified polymorphic DNA-polimerase chain reaction (RAPD-PCR) show MSG is genotoxic to the human peripheral blood lymphocytes (Ataseven et al. 2016).

DISCUSSION

Some researchers suggested MSG usage on food may increase women BMI and weigh while other study found that MSG did not change women motivation to take more meals, and no weight gain and increase hemoglobin level in women. One study even stated that women had decrease in snack and hunger after MSG containing food (Carter et al. 2011; He 2008; Shi et al. 2012). MSG in some studies increase energy intake in elderly and elevated glucose level in blood (He 2008). This proposed MSG might elevated body weight as MSG add delicacy and motivate people to take more foods. Genotoxicity of MSG has become focus research in many years. Most of the study was conducted on animals samples and human substance in vitro (Ataseven et al. 2016; El-Meghawry El-Kenawy et al. 2013; Farombi and Onyema 2006; Ilegbedion et al. 2013; Kate S Collison 2012; Zumin Shi 2010).

Although most research in animals and human lymphocytes showed negative effect of MSG, researchers state that the results of the studies should not be generalized for human. Besides, some antioxidant like vitamin C, and quercetin show positive protection effect on cell with MSG inflammation effect (El-Meghawry El-Kenawy et al. 2013; Farombi and Onyema 2006). The study of MSG effect on human health especially women's health need to be continue. Despite lots of in vitro studies shows negative effect of MSG on female reproductive organ, to necessitate the prohibition of use of MSG is not available. It is important that MSG is not use excessively as an additive in foods for women.

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PREGNANCY TO MATERNAL CONFIDENCE

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ABSTRACT

Introduction: Teenage pregnancy lead to high risk of pregnancy that will affect the baby care, low maternal confidence will hinder the process of transition becoming a mother. Nurse have an extraordinary oportunity to help woman learn and gain confidence. The purpose of this study was to analyze the mother and infant outcome teenage pregnancy to maternal confidence in Mataram. **Methods:** This was a cross-sectional study with proportional random sampling, the subject were mothers who had given birth on 2014 at 4 PONE primary health service and public hospital of Mataram. Inclusion criteria were mother who lived in Mataram, primipara, married and not in divorce, no postpartum depression and not under domestic violence, consisting of 50 teenage and 50 adult mother. Data collection was conducted from 2 until 28 March 2015 after approved ethical clearance by the health research ethics committee and informed consent to the respondent. Research variables were demographic characteristic, maternal outcome, infant outcome and maternal confidence. Maternal & infant outcome data were collected from medical records by check list and maternal confidence were collected by Maternal Confidence Questionnaire then analized by chi square. **Result:** The result showed that poor maternal outcome on teenage pregnancy are SC occured 4 times. Poor infant outcome are asphyxsia occured 2,5 times, LBW occured 6 times, prematurity occured 2 times. Maternal confidence did not influence by maternal and infant outcome. There were difference infant outcome ($p=0.017$) and maternal confidence ($p=0,000$) between teenage mothers compare adult mothers. **Discussion:** Maternal confidence did not influence by maternal and infant outcome, there were no difference between teenage mothers compared adult mothers on maternal outcome. Infant outcome and maternal confidence are better on adult mothers compare to teenage mothers.

Keyword: Maternal Outcome, Infant Outcome, Maternal Confidence

DAY CARE CENTRE MODEL OF NURSING FACULTY

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ABSTRACT

Introduction: Working parents will lead to reduced attention to children and issues related to parenting. Good parenting based on children growth and development will shape good character of children. Providing day care focusing on the needs of children can be used as alternative fulfillment of the basic needs of child development, such as parenting, and education to improve the quality of child development is essential. **Method:** The purpose of this study was to develop a product in the form of the design model in the form of modules that can be used as the basis for the development of *a day care center is by using Research and Development consisting of seven (7) steps* with interviews and observation as data collection. **Result:** The results of this research is the design of the establishment of daycare by adapting to the technical guidance delivery of day care the Ministry of National Education. To sum up, day care centre (DCC) can be an alternative for early childhood education services for parental working having children of preschool age. **Conclusion:** Day care centre needs to be designed specifically either program, staff, and equipments. This service is provided in the form of improved nutrition, development of intellectual, emotional and social packed in age-appropriate curriculum based on the standards of early childhood development.

Keywords: *day care, faculty of nursing, growth and development*

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CAREGIVER COPING EXPERIENCES ON TAKING CARE THE DEMENTIA ELDERLY IN A NURSING HOME

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ABSTRACT

Introduction. Taking care dementia was stressful for both physical and emotional. The stress and burden influenced the caregiver's quality of life. Consequently, emotional and behavior changes shown by the caregiver which is called coping mechanism appeared. The objective of the study is to identify a caregiver's coping experiences on taking care the dementia elderly in nursing home.

Method. This study used qualitative research design with phenomenology approach. The sampling technique used purposive sampling. There were ten participants that consisted of seven caregiver's and three members of the nursing home management used. This study used interview, processing and the analysis used Collaizi method.

Result. The study result identified fifteen themes, first it was dementia concept. The ways of taking care the dementia comprised the basic need, objective, method and social support. The obstacles which the caregivers felt were demand and burdens. The ways of handling obstacles were modified ways of care, coping mechanism and the supports sources. The caregiver's hope in the comprised the structure of dementia, quality of life the elderly, health services and the caregiver's welfare. **Conclusion.** Caregiver's coping were influenced by the caregiver's understanding about dementia, the way for caring them, the obstacles, problem solving and caregivers hope. The result suggests the need of support from other caregiver, nursing home members, caregiver's family, community health centers, regional hospital, social department, and other organizations in dementia care. Ethnography study use uncertainty in illness model to explore caregiver coping experiences need to conduct for future study.

Keywords: Experiences, Coping, Caregiver, Elderly, Dementia

THE EFFECT OF GAMELAN AS A MUSIC THERAPY TO DECREASE THE STRESS LEVELS OF THE ELDERLY IN LAWANGAN – LAMONGAN

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ABSTRACT

Introduction: Stress can be experienced by everyone, including the elderly. Stress cannot be eliminated from a person's life, but everyone can make efforts to lower the stress levels. The purpose of this study was to analyze the effect of gamelan as a music therapy to decrease the stress levels of the elderly in Lawangan – Lamongan. **Method:** This study used pre-experimental design with one group pretest and posttest. Simple random sampling was used and the sample size was 38 elderly from total population of 42 elderly. The data of this study was taken using questionnaire and observation. After being tabulated, the data were analyzed using Wilcoxon Rank Signal Test with significance level $p = < 0.05$. **Result:** The results showed that before giving treatment gamelan music therapy, elderly people experiencing moderate stress were 81.6 percent and 18.4 percent experiencing severe stress. After being given gamelan music therapy, 60.5 percent experienced mild stress, 26.3 percent experienced moderate stress and 13.2 percent did not experience stress (normal). After doing the statistical test, it was obtained that the mean score of stress before being given the treatment was 24.37, while the mean score after being given the treatment decreased into 17,97 with the score of $Z = -5.097$ and $p = 0.000$ which means that there was effect of gamelan music therapy in decreasing the stress levels of elderly. **Discussion:** To overcome stress in the elderly, gamelan music therapy is an alternative treatment non pharmacological that can be used to reduce stress levels.

Keywords: Music Therapy, Gamelan, Stress, Elderly

INTRODUCTION

Naturally everyone will grow older and aging. This process cannot be avoided whatever the way is. In Indonesia, elderly are those who aged 60 years or older than that and include in a resident group that became the focus of our attention. The Number of elderly continues to increase both in Indonesia and all over the world bringing a variety of problems that cannot be anticipated and looked for a way out (MOH, 2013).

In general, physical condition of a person who has come to elderly will decrease. Elderly in society is seen as a group of people having higher risk of experiencing health problems. In general, health problems lead to physical and psychological health setbacks that ultimately will affect their social and economic activities. Thus, it will affect the activities of daily life (Nugroho, 2008).

Approximately 70% of elderly in East Java experiences stress. The trigger is an external factor such as financial problems and

lack of attention from the family. Lamongan in the year of 2010, the number of elderly was 3,456 and only 2,300 of them that have life expectancy (BPS, 2014).

Based on the results of the initial survey conducted in October, there were 42 elderly living in Lawangan – Lamongan. The result showed that 7 of 10 elderly people in that village experiencing stress, 4 elderly (57%) experiencing moderate stress and 3 people (42.8%) experiencing severe stress. It is caused by the physical changes, disease, and losing factors. From these data it can be concluded that there were many elderly experiencing stress.

Long-term stress can increase the physical change and mental illness. Stress cannot be separated from a person's life, but everyone can make some efforts to reduce their stress levels (Rasmun, 2004).

The efforts that can be done to lower the stress levels are by regular exercise, having humor, good nutrition and diet, enough rest,

doing relaxation techniques, spiritualism, and distraction techniques. One alternative treatment to reduce stress is gamelan music therapy in which musical therapy is a distraction expected to reduce the physiological pain, stress, and anxiety to throw off a person from pain. Music has been proven that it has effects in lowering the heart rate, reducing anxiety and depression, relieving pain, lowering blood pressure, and changing the perception of time (Perry & Potter, 2009).

Javanese gamelan music is the music produced by a set of instruments usually called as karawitan. Javanese art gamelan contains the values of historical and philosophical Indonesian, especially for Javanese. Javanese gamelan also has an aesthetic function related to social, moral and spiritual values. The notes organization of Javanese gamelan is divided into two, those are gamelan laras slendro (soft music, full of dignity, serenity and devoted to older people) and gamelan laras pelog (the motions of the songs so enthusiastic and proposed to youth) (Purwadi & Widayat, 2006).

METHOD

This study used pre-experimental design with one group pretest and posttest with cross sectional approach. The population in this study was 42 elderly who live in Lawangan. Besides, the sample used was 38 elderly living in Lawangan who met the inclusion criteria using simple random sampling technique. This research was conducted in Lawangan on October 2014 to April 2015. The instrument used for data collection in this study was questionnaire of Depression Anxiety Stress Scale (DASS). DASS classification score of normal/no stress (0-14), mild stress (15-18), moderate stress (19-25), high stress (26-33), and severe stress (34+). The data were analyzed using Wilcoxon Signed Rank Test. Gamelan music therapy is given to the elderly for 5 minutes every day within a week.

RESULTS

1. General Data

Table 1. The Distribution of the Elderly characteristics in Lawangan – Lamongan

Variables	N	%
Sex		
Male	13	34,2
Female	25	65,8
Ages		
60-74	24	63,2
75-90	14	36,8
Education background		
Elementary school	34	89,5
Junior high school	2	5,3
Senior high school	1	2,6
Bachelor degree	1	2,6

Table one shows that 25 elderly people (65.8%) were female, 24 elderly (63.2%) were aged 60-74 years old, and 34 elderly (89.5%) have education levels till elementary school.

2. Special Data

Table 2. The Distribution of Elderly by their Stress Levels before being treated using Gamelan Music Therapy in Lawangan – Lamongan

No	Stress Levels	Frequency	Percentage (%)
1	Normal	-	-
2	Mild	-	-
3	Moderate	31	81,6%
4	High	7	18,4%
5	Severe	-	-
	Total	38	100%

Table two shows that 31 elderly people (81.6%) experiencing moderate stress, while 7 elderly (18.4%) experiencing severe stress before being given gamelan music therapy.

Table 3. The Characteristics of the Elderly by their Stress Levels after being treated using Gamelan Music Therapy in Lawangan – Lamongan

No	Stress Level	Frequency	Percentage (%)
1	Normal	5	13,2%
2	Mid	23	60,5%
3	Moderate	10	26,3%
4	High	-	-
5	Severe	-	-
	Total	38	100%

Table three shows that 23 elderly people (60.5%) experiencing mild stress and 5 elderly

(13.2%) experiencing no stress (normal) after being treated gamelan music therapy.

Table 4. The Effect of Gamelan Music Therapy to Decrease the Stress Levels of Elderly in Lawangan – Lamongan.

	N	Mean (Min-Max)	P	Z
Stress pre-Intervention	38	24,37 (19-33)	0,000	-5,097
Stress post-Intervention	38	17,97 (14-25)		

Table four shows that the mean score of stress before being given gamelan music therapy was 24.37, while the mean score of stress after being given gamelan music therapy decreased into 17,97 by $p=0.000$ (p value <0.05) with Z score = -5,097.

DISCUSSION

1) The Stress Levels of Pre Intervention in Lawangan – Lamongan

Table five shows that 31 elderly people (81.6%) experiencing moderate stress, while 7 elderly (18.4%) experiencing severe stress before being given gamelan music therapy.

There are many causes of stress ranging from romance problems, friendship, economic, family, work, and so on. Stressed people are usually easy to get irritated and they are very sensitive. In general, there are four categories triggering stress, those are personality stress, psychosocial stress, biological stress, and working stress (Aizid, 2011).

Long-term stress can increase the chance of physical and mental illness. Stress cannot be eliminated from a person's life, but he/she can make efforts to lower the stress levels (Rasmun, 2004).

This indicates that most of the elderly who live in Lawangan experiencing moderate stress and only small part of them experiencing severe stress. This happens because elderly get a feeling of loneliness that make them do not get adequate support from people nearby. Besides, elderly also experience lack sense of confidence, loss of strength and earning that they tend to get stress. To prevent stress in the elderly, health workers can provide positive activities for them such as getting them together with the loved ones so there will be good communication among them.

2) The Stress Levels of Post Intervention in Lawangan – Lamongan

Table six shows that after being given the intervention of gamelan music therapy, 23 elderly (60.5%) experienced mild stress and 10 of them (26.3%) experienced moderate stress.

According to Perry & Potter (2009), music therapy is a distraction expected to reduce the physiological pain, stress, and anxiety to throw off a person from pain. Music has been proven that it has effects in lowering the heart rate, reducing anxiety and depression, relieving pain, lowering blood pressure, and changing the perception of time.

Music has the power to cure illnesses and disabilities experienced by everyone. When music is applied as a music therapy, music can enhance, restore and maintain physical health, spiritual, emotional and every individual (Purwadi & Widayat, 2006).

After being treated using gamelan music therapy, it is obtained that most of elderly experienced mild stress and a few of them experience moderate stress. The data from this study indicates that the intervention of gamelan music therapy can help to deal with the response in reducing stress experienced by the elderly.

3) The Effect of Gamelan Music Therapy to Decrease the Stress Levels of Elderly in Lawangan – Lamongan

The result of this study using statistical test by Wilcoxon Sign Rank Test showed the significance value ($p=0.000$) in which it means $p<0.05$ so that it can be concluded that there is an effect of gamelan music therapy in decreasing the stress level of the elderly in the Lawangan – Lamongan.

Positive emotional response from the effect of gamelan music therapy will be responded through the sense of hearing. In the sense of hearing, it will be received by the ear and then forwarded to the cerebral cortex which then will stimulate the hypothalamic-pituitary-adrenal axis. Hypothalamus will inhibit the spending of CRF (Corticotropin Releasing Factor) that will affect the pituitary gland to lower the secretion of ACTH (Adrenocorticotrophic hormone). The reduction of ACTH can affect the adrenal cortex which then followed by the decreasing of cortisol and other stress hormones. On the other hand, ACTH as the results of pituitary affects the production of beta endorphins which can make the body become relaxed, calm, and has

positive perceptions. So, the level of stress in the elderly can be inhibited or even can decrease (Mulyata, 2005).

Based on the data gained, it indicates that the intervention of gamelan music therapy can help elderly to handle and reduce stress they experienced. The changes of the stress level in the elderly are due to the rhythm of gamelan music. It makes them feel so comfortable that their stress can be decreased.

CONCLUSION

Most elderly experienced moderate stress and very few of them experienced severe stress before being given treatment of gamelan music therapy. After being treated by gamelan music therapy, most of them experienced mild stress. It means that gamelan music therapy can reduce the stress levels of the elderly in Lawangan – Lamongan.

There already are some therapies used to lower stress levels. One of them having been proved is music therapy. Therefore, elderly experiencing stress should be given music therapy since it can reduce the use of antidepressant medications.

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FACTOR ANALYSIS OF THE AGE, GENDER AND DISEASE ON ELDERLY AGAINST GERIATRIC SYNDROME

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ABSTRACT

Background. People's health quality improvement and life expectancy especially on elder are the impact of global advancing progress in the field of health. Increasing life expectancy indicates that Indonesian elders have a longer life, which means there will be more increasing problem associated with a decline in physical, psychological and social condition. The aging process resulting in more prone towards diseases and weaker constitution, even experiencing physical inabilities and psychological disorders. These problems is a result of the aging process called geriatric syndrome which among them includes urine incontinency, vision disturbances, hearing disorders and dementia. This research aims to seek determinan age factor, gender and disease on elderly against geriatric syndrome.**Method.**Using Design used is *cross-sectional* research. The population came from all over the elderly in Baturetno Village, Singosari Sub-district of Malang Regency, as much as 35 people that meet inclusion criteria taken by *simple random sampling* technique. Independent variables are age, gender and disease in the elder, while dependent one is geriatric syndrome. Data collected using questionnaires and further analyzed with statistics logistic regression compounds test with 95% level of trust.**Results.**The results showed that elder's age, gender and disease is determinant of geriatric syndrome.**Conclusion.** Providing supportive environment/support the elderly to keep them comfortable, healthy and cheerful is highly recommended for families. Alongside with healthcare institution facilitates with infrastructure that can support the efforts of elder health monitoring, gives understanding through dissemination regularly and training associated with elder healthy efforts.

Key Words : *age, gender, disease, geriatric syndrom*

INTRODUCTION

Improving the quality of health of the population as well as the life expectancy of humans, especially the elderly population can be considered as the positive impact of progress in all fields , especially in the health sector . It is estimated that the number of elderly around the world there are 500 million with an average age of 60 years and is expected in 2020 will reach 11.34 % of the total population of Indonesia , and in 2025 will increase to reach 1.2 billion (Nugroho , 2000: 1) ,

In the next few years , the possibility of the elderly population in Indonesia will be greater than the number of children under the age of five . The increase in the number of elderly in Indonesia looks at the census every five years. Increasing life expectancy indicates that the elderly population of Indonesia will become longer , and it will affect the increasing problems in the elderly are

associated with a reduction in the physical, psychological and social .

Advanced age is the final stage of the human life cycle is a natural process of life that can not be avoided and will be experienced by each individual . The aging process is natural , human, can not be avoided and will be experienced by every human being . The process of aging would affect the decline in the function of physiological organs and daily functioning (disability) , the aging process also causes the body more sensitive to disease and suffered weakness , setbacks and even the inability of physical , psychological disorder , spiritually and socially and even fourth influence each other ,

Health problems of the elderly includes physical problems , psychological and social functional status measured by the elderly and the aging process description can be seen in the decline in functional status . Assessment

of functional status measured by activity of daily living (ADL) , ADL decline in the elderly causes the inability of seniors to meet their own needs . Besides the issue of functional status , the elderly No specific problems faced by the elderly are normal changes in the physical is often called syndrome geriatric ie which include urinary incontinence , hearing impairment , visual impairment and dementia or in Javanese culture Syndrome geriatric often described by the term 4B is blereng (maata blurred) , deaf (hearing loss) , beser (frequent urination) , and a hunchback (crooked spine) .

Syndrome geriatric occurs more frequently in women than men , it is because she feels she was weak and easily complain if she was sick , and what is perceived to be an impact on his physical condition , and with the increasing age of a person , the manifestation of the syndrome geriatric will seem , According to the research results Djuari Lili (2012) that turned out to be a geriatric syndrome can also be affected by the disease , the research proves that there is a relationship dementia with several diseases including hypertension , poor nutritional status and depression . While the geriatric syndrome relationship with age , according to research most significant Lilik is on incontinence , dementia and hearing loss.

The process of aging itself is a process of gradual disappearance - land network's ability to improve / replace themselves and maintain their normal structure and function that can not survive the infection and repair the damage suffered (Nugroho , 2000: 13) . If the aging process is already under way then in the body also began to change the structural change which is a degenerative process . And most of the elderly haunted by problems of geriatric syndrome is a collection of symptoms or clinical signs of one or more diseases that are owned by elderly patients .

Developing countries including Indonesia experiencing an epidemiological transition cause of death due to infectious diseases and acute and chronic degenerative diseases (WHO , 1998) and morbidity rates are high enough occur in the elderly ≥ 65 years of age . Another disease that affects many elderly are mental disorders , such as depression and dementia . The prevalence of mental disorders in the elderly is very high ,

namely 56.2 % of elderly dementia and 23.4 % had depression (Hand, 2006) . Some conditions such as degenerative diseases , chronic diseases and psychosocial problems will affect the health and quality of life of the elderly (WHO , 2005) .

Quality of life of elderly people who are described as physical, functional , emotional and social factors tend to decrease with age. The average domain of social quality of life of elderly in the age group ≥ 75 years of the lowest compared to other age groups . Based on the research results and Elly HerwanaYenny , Section of Pharmacology Faculty of Medicine, University of Trisakti (2006) , the quality of life of physical and environmental domains differ significantly among the elderly who have and have not experienced chronic diseases . Chronic disease had significantly lower quality of life of the elderly . Chronic diseases affect the quality of life in the elderly and plays a role in the inability of seniors to live independently .

At this time of heart disease , blood vessel (cardiovascular) and tuberculosis are the first cause of death in the elderly group (Bandiyah , 2009) , so that the necessary type and quality of health services and treatments done by the elderly themselves, family , team homecare , Posyandu or social homes / nursing home (Nugroho , 2008) . Early detection through screening activities and the medical examination conducted laboratory nurse and elderly cadres in the health hut hut in the community then the screening results if necessary be referred to the clinic or to the hospital to be able to prevent the death of the elderly.

Based on the above phenomenon , the researchers wanted to know the determinant factors of age , sex and disease of the elderly to a geriatric syndrome in an effort to improve the quality of life of elderly and improving the quality of service to the community .

DISCUSSION

Research results in Table 4 show that the age, gender and disease in the elderly is a determinant of geriatric syndrome , but the age factor that is more meaningful to the geriatric syndrome .

It is theorized that the syndrome geriatric occur as a result of the aging process , so that when someone starts entering old age (55 years

according to the MOH RI), the symptoms of the syndrome geriatric also has begun to appear , someone has started a lot to complain related to his physical condition , for example related to musculoskeletal because the aging process in the bones , joints and muscle tissue so often feel rheumatic pains , the hearing began to diminish , and the vision began to blur

The aging process is closely linked to the life of someone specifically in the elderly were age 56 years or older, and the older the age, the more there is a decrease in whole body systems. Based on the results of research most respondents ages ranged in age from 56-60 years, which means that the age of the respondents still are in the elderly category Presenium but many are asymptomatic geriatric syndrome. According to researchers, this is likely to be influenced by factors other factors such as nutritional status, activity and lifestyle. Although he was not yet including the elderly end but if the nutritional status, activity and lifestyle is not good then the aging process can be done quickly which ultimately sooner symptoms syndrome, geriatric, and with the appearance of symptoms syndrome geriatric will also be an impact on a person's psychological and things this is even more speed up the emergence of symptoms of geriatric syndrome that although respondents are in the age of the elderly Presenium, did not rule out other symptoms of geriatric syndrome also have started to appear, for example incontinent, orthostatic hypotension, hearing impairment, visual impairment and dementia.

Elderly is a person aged 60 years and older . The aging process occurs conditions weakening muscle contractions of the detrusor muscle that play a role in the process of voiding , resulting in incontinence . Aging also leads to changes in anatomy and biochemistry in the central nervous system resulting in memory loss or dementia (Lili , 2012) , so the older the person will sooner symptoms syndrome geriatric , so this is in accordance with the results of statistical testing on showing that more meaningful age factor influencing the occurrence of the syndrome geritrik

Nevertheless the acceleration or deceleration process of the aging process is influenced by many factors other than age. Accelerated aging process can be affected by the disease,

according to research results Djuari Lili (2012) that turned out to be a geriatric syndrome can also be affected by the disease, the research proves that there is a relationship dementia with several diseases including hypertension, poor nutritional status and depression. The concept of a geriatric syndrome occurs as a result of the aging process in which as a result of decline in physical function, the body more sensitive to the disease so prone to weakness, incompetence and even physical deterioration and ultimately have an impact on a psychological disorder. In the results showed that most respondents have hypertension in addition to elderly people with diabetes mellitus, hypertension is a disease that arises due to the interaction of various risk factors for the onset of hypertension, such as age, obesity, stress, excessive salt intake, lack of activity, smoking. The loss of tissue elasticity and atherosclerosis as well as the dilation of blood vessels is a causative factor of hypertension in older age (Sutanto, 2010), and hypertension is a risk factor for dementia in the elderly.

Can be explained also that the disease affects syndrome geriatric , it is likely that someone with a physical condition impaired will make itself increasingly felt worried , felt confident that eventually all had an impact on the psychological condition that can result in depression and continues on the condition of dementia . Hypertension in general, more men are affected than women with hypertension . This is due to the man many have factors that encourage the occurrence of hypertension such as fatigue , feeling less comfortable to work activities .

The results of this study also showed that gender affects geriatric syndrome . If linked with sex , according to Lili in 2012 in his dissertation, wrote that the syndrome geriatric occurs more frequently in women than men , and the percentage is increasing, it can be explained that women felt weak , very callous so easy to feel weak, easily complain of pain and what who felt women would manifest in body condition. While in elderly men as the strong feeling , which is not easily complain of pain so that what is felt by the elderly men will have an impact on his physical state which would slow the appearance of symptoms of geriatric syndromes .

One symptom is urinary incontinence geriatric syndrome. Urinary incontinence is the

loss of urine that can not be controlled, objectively demonstrable existence of a social problem and hygiene. Urinary incontinence is more common in older women than older men. Although urinary incontinence in the elderly has a great influence for the life of the elderly themselves but the causes and management no one has determined exactly why many people with incontinence who do not want to seek help to treat incontinence that happened, chances are they do not know, embarrassed and frightened that could eventually become one of the factors of depression in the elderly and depression becomes a risk factor for dementia. That is why the causes and treatment of incontinence has been no provision for certain means that incontinence is not a normal thing in accordance with increased age alone but incontinence in the elderly, especially elderly women are due to multifactorial, in these conditions necessary to provide insight and training to the elderly so that the elderly can cure incontinence experienced. ,

According to the theory of self care (self-care) developed by Dorothea E. Orem that the elderly is seen as an individual who has the ability to care for himself (Self care agency) to meet the needs of life, maintain health and achieve prosperity (Self care demands) optimal by knowing the proper treatment in accordance with the conditions themselves. Here we need a support system / educator, one of which is through the actions of the nurse. Nurses provide health education or explanation to motivate so that patients doing self care, and of course the necessary willingness whereby patients / individuals must learn to carry out the provisions needed externally or internally, to mobilize a therapeutic self-care. Method of assistance that can be given such an act, guides, lessons, support and provide constructive environment Based on the above, the presence posyandu as a service for the elderly is considered very strategic for elderly people to be able to realize a better life in terms of physical health, psychological, spiritual and social life

If the elderly who come to posyandu know if he disturbed both associated with the aging process or because of other things it can be ascertained elderly soon get help from a team of health or the cadres elderly to immediately be able to refer to the health center and the elderly are no distractions in order to remain come to posyandu to continue

the examination as early detection screening efforts in the elderly distractions

METHODS

Based on the research objectives , this study used cross sectional design Population , sample , sample size and sampling techniques (sampling).The population in this study were all elderly in LowokjatiHamlet , Village BaturetnoSingosariMalang some 177 people . The sample in this study was selected population that met the inclusion criteria , namely :1) Seniors aged ≥ 55 years / as time Presenium (DepKes RI) , 2) Seniors are willing to become respondents. The number of samples based Arikunto (2010) of 20 % of the population is 35 people .Samples were taken by simple random sampling . Independent variables are age , gender , disease in the elderly. Dependent Variable is Geriatric syndrome

Independent Variables :

Age is the length of the elderly live in this world that is based on data from the National Identity Card of the elderly . Gender identity is linked to physical aging as male or female based on data from the National Identity Card of the elderly . Diseases of the elderly is one or more disease that affects the elderly are based on data from the results of physical examination and laboratory investigations.

Dependent Variables :

Geriatric syndrome is a syndrome consisting of complaints over the health of the elderly consisting of urinary incontinence is urine output without realizing it, in an amount and frequency sufficient to result in health problems and social problems ; visual impairment is impairment of accommodation with the manifestation of presbyopia where someone will find it hard to look closely influenced by the aging process or the presence of cataracts , measured by reading the newspaper with a distance of 30 cm ; hearing loss is a hearing loss through hearing tests by using a tuning fork where the elderly had not heard the sound of a tuning fork vibration while inspectors could still hear the sound of a tuning fork vibration ; and dementia that thought process disturbance whose judgment is measured by using AMT (Abbreviated Mental Test) .

Research Instruments

- 1) The questionnaire on demographic characteristics include name, age , gender, occupation , religion and illness in the elderly.
- 2) inspection tools include: sphygmomanometer , gluko test, newspapers , tuning forks and questionnaires

Research Location

The study was conducted in the village of BaturetnoSingosariMalang .

Research Time

Research will be conducted on approximately July - October 2015

Data Collection Procedures

After getting a license study, researchers approached by local Posyandu cadres to obtain data on the elderly (name and address) then the researchers began collecting data on the elderly in the village Lowokjati by visiting one by one in their homes . Prior to the implementation of data collection , the researchers explained the purpose of research , data collection procedures , risks and benefits of research to the respondent .

If the respondent is willing to voluntarily participate in the study, the respondents were asked to sign an informed consent sheet . Further data collection is done with the following steps :

- 1) Collecting data about the characteristics of the respondents include name, age , gender, occupation , and religion by using the enclosed questionnaire .

2) Perform a physical examination and laboratory to obtain data about the disease in the elderly (hypertension , diabetes mellitus , rheumatic pains , coughing , etc.)

3) Collecting data to obtain data that includes a geriatric syndrom

a. Urinary incontinence, using an open questionnaire, a value of 0 = none, 1 = value incontinence

b. Hearing loss, using observation sheet and a tuning fork, a value of 0 = none, 1 = value of hearing loss

c. Impaired vision, using observation sheet and reading objects such as newspapers, a value of 0 = none, 1 = value of visual impairment

d. Dementia, using questionnaires AMT (Abbreviated Mental Test) score of 0 = answer wrong, score 1 = answers are correct, then interpreted: Normal, when the total score = 8-10, no memory problems when the total score = 0-7

Data Processing

Data processing begins with the editing, which is to re-examine the data collected if there is a mistake in the process, further data is coded (coding), which provides the specific code on any data making it easier to analyze data. Researchers conducted the scoring that data by a certain score. The next stage is data entry, cleaning the data and tabulating data.

Data Analysis

The data were then analyzed by multivariate statistical methods by using multiple logistic regression analysis at the 95% confidence level to determine the determinants of age, gender and disease of the geriatric syndrome.

Table 1 shows that the majority of respondents aged 55-60 years (51 %) , female (54 %) , and the majority of respondents with hypertension (35 %)

Description	n	%
Age 55-60 years	18	51
>61 years	17	49
Total	35	100
Male	16	46
Female	19	54
Total	35	100
Disease in elderly:		
Hypertension	12	35
DM	5	14
Rheumatic Pains	10	28

Cough	1	3
Back Pain	6	17
No Pain	1	3
Total	35	100

Table 2 Description Geriatric Syndrome

Geriatric Syndrome	19	54
No distractions	16	46
Total	35	100

Tabel2 . Showed that most respondents do not syndrome geriatric (54 %)

Based on the multiple logistic regression analysis in Table 3shows that the age, gender
CONCLUSION

Suggest to a family who lived with the elderly to provide a supportive environment / support seniors remained comfortable , healthy and cheerful in life in their old age , such as family use and maintain personal relationships with therapeutic communication so that the elderly do not experience loneliness , provide the means infrastructure necessary to the elderly , to facilitate the elderly carried out in accordance capabilities such as sports, walking as a routine activity , providing book light reading , crossword book , radio or television as a means elderly in maintaining their physical and mental remain in a healthy condition , provide nutritional value nutritional needs of the elderly.

Facilitate the infrastructure that can support the elderly health monitoring efforts , routinely provide understanding through education and training is closely linked to the health of the elderly . Update their knowledge for the health team and elderly cadres in order to further provide services labih nice and professional.

Facilitating the lecturers and students to run Tri Dharma College , especially in community service activities in the elderly, with information activities , gymnastics elderly , appropriate activities with the elderly hobbies such as sewing , farming in rmh own examination geriatric syndrome symptoms early detection of disease or disease of the elderly with laboratory tests for example, examination of blood sugar , uric acid and cholesterol.

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and disease in the elderly is a determinant of the geriatric syndrome but the age factor is more meaningful to the geriatric syndrome

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THE EFFECT OF GROUP THERAPY ACTIVITY (TAK) – SENSORY STIMULATION TOWARD THE DEPRESSION LEVELS OF THE ELDERLY IN UPT PASURUAN ELDERLY SOCIAL SERVICES BABAT – LAMONGAN

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ABSTRACT

Introduction Depression is a nature disorder characterized by feeling of excessive sadness, depressed, dispirit, empty, worthless, hopeless, and failure till get the idea to do suiciding (Joseph,2007). The purpose of this study was to determine the effect of group therapy activity – sensory stimulation before and after given to the elderly. **Method** The design of this study used pre - experimental design with one group pre-test and post-test. The population was 55 elderly experiencing depression in UPT Pasuruan elderly Social services Babat – Lamongan. Sample used was 48 elderly taken by random sampling technique. The data was analysed using Wilcoxon Sign Rank Test and collected using guidance sheet of group therapy activity – sensory stimulation and questionnaire. **The results** of this study showed the Wilcoxon Sign Rank Test $\alpha=0,05$ and $p = 0,000$ in which $p \text{ sign} < 0,05$. It shows that H1 was accepted and means that there was an effect of group therapy activity – sensory stimulation toward the depression levels of the elderly in UPT Pasuruan elderly Social services Babat – Lamongan. **Discussion** The researcher realized the importance of group therapy activity – sensory stimulation toward the elderly experiencing depression that he conducted a study about it entitle the effect of group therapy activity – sensory stimulation toward the depression levels of the elderly in UPT Pasuruan elderly Social services Babat – Lamongan.

Keywords : *Group Therapy Activity – Sensory Stimulation, Depression levels, Elderly*

INTRODUCTION

Aging or growing old is a condition that happens in human life. The process of aging is a lifelong process, not only starting from a certain time, but starting from the beginning of life. Growing old is a natural process, which means that someone has gone through three stages of life, that are children, adults, and elderly. Coming up to the old age mean setbacks, such as physical deterioration characterized by sagging skin, greying hair, toothless, less hearing ability, worse eyesight, slow motion, and disproportionate body figure (Wahyudi, 2008).

Depression is a feeling of sadness, hopelessness, and pessimism associated with suffering. It can be shown by yourself or feeling of angry (Wahyudi, 2008). Depression is a nature disorder characterized by excessive feelings of sadness, depressed, dispirited empty, worthless, hopeless, and failure until get the idea to suicide (Joseph, 2007).

According to the World Health Organization (WHO), it estimates that the

prevalence of depression on the elderly in the world ranging from 8-15%. A meta-analysis of countries in the world gets the average prevalence of depression in the elderly is 13,5% with a ratio of women and men 14,1: 8,6. Besides, the prevalence of depression in the elderly undergoing treatment is about 30-40 %. Depression affects nearly 10 million Americans of all ages, socio-economic class, race, and culture. Among the elderly, depression continues to be a serious mental health problem even though the understanding of the causes and development of pharmacological and psychotherapeutic treatment is more advanced. Epidemiological studies on depression among elderly people in community report vary widely levels, from 2 to 44% depending on the criteria used to define depression (eg.DSM-IV criteria of strict versus despair and natural feelings of inferiority) and the methods used to evaluate it (eg. complaint to himself or short basic scale versus clinical psychiatric evaluation in depth). The most appropriate study states that the important

symptoms of depression attacked approximately 10 to 15% of all people aged over 65 years who are not institutionalized (Stanley, 2006).

Based on population census by the Central Statistics Agency (BPS), the percentage of the elderly population aged 60 years or over to the total population in Indonesia has increased from 1971 to 2010. Starting from 1971 the percentage of the elderly population aged 60 or over was 5,3 million (4.5%), in 1980 was 7,9 million (5,4%), in 1990 was 11,2 million (6.2%), in 2000 was 14,8 million (7.2%) and in 2010 was 18 million (7.6%). Meanwhile, based on the initial survey carried out by the researcher on 9 October 2015 in the UPT Pasuruan elderly Social services Babat mentioned that the population was 55 people consisting of 13 men and 42 women. On the data found that elderly people experiencing severe depression was 8 people, 7 people got moderate depression, 2 people experienced mild depression and 3 people were in normal condition. During this time, there was no action or never to overcome neurotic depression. From these results it can be concluded that there were many elderly still experiencing depression. Factors that affect depression include physical factors and psychological factors. Physical factors may include : 1) Genetic factors ; the genetic factors explained that someone that in his/her family there is one suffering from severe depression will have a higher risk to get depression because the genes passed down from parents to their children, 2) Chemical composition in the brain and body ; some chemicals in the brain and the body hold a big role in controlling our emotions. It was found that in one suffering depression found that there were changes to those chemicals, 3) Age ; younger age and adolescents may experience depression more, 4) Gender ; women experience more depression than men. It is because women get difficulties to communicate their problem to others, and 5) Lifestyle ; habit and unhealthy lifestyle can lead to a disease where the disease can trigger anxiety and even depression. Besides, the physiological factors that may affect them are: 1) Personality ; personality of someone who tends to have a negative mind, pessimistic and introverted will have more chance to get depression, 2) Mindset ; someone having negative mindset towards him/herself

tends to get depression, 3) Self-esteem ; low self -esteem can trigger depression, 4) Stress ; losing one loved can turn up into a very long stress causing depression, and 5) Family ; it includes family environment and family support. A difficult problem being not able to be solved will lead to stress and can turn into depression.

The therapeutic relationship in verbal and non-verbal or direct contact can improve the communication and trust to the elderly and individuals that suffering depression. Elderly people who are depressed usually feel alone and worthless (Wahyudi,2008). Intensive group therapy activity can provide psychological support. In addition to that, the group therapy activity also emphasized the feeling and relationship among members aimed to reduce social isolation (Mubarak, 2009). Group therapy activity can be administered to individuals with depressive disorders that include blank stare, lack or loss of sight, self-initiative decline, inability to concentrate, decreased activity, lack of appetite, complaining of not feeling well, sad, tired all the time, difficult to sleep at night, having faith of useless life and even committing suicide.

Realizing the important of group therapy activity – sensory stimulation toward the elderly, the researcher is interested in taking this as the research issue. The title of this study is "The Effect of Group Therapy Activity (TAK) – Sensory Stimulation toward the Depression levels of the elderly in UPT Pasuruan elderly Social services Babat – Lamongan".

METHODS

The design of this study used pre-experimental design with one group pre-test and post-test (Nursalam, 2008). The population was 55 elderly experiencing depression in UPT Pasuruan elderly Social services Babat – Lamongan during October to February 2015. Sample used was 48 elderly mostly experiencing depression taken by random sampling technique (Arikunto, 2006). The data was analysed using Wilcoxon Sign Rank Test and collected using guidance sheet of group therapy activity (TAK) – sensory stimulation and questionnaire (Keliat, 2005).

RESULTS OF THE STUDY

A. General Data

1) The Distribution of Respondents by Gender

No	Gender	Frequency	Percentage (%)
1.	Male	18	37,5
2.	Female	30	62,5
Total		48	100

The above data shows that 62,5 % or 32 respondents experiencing depression were female.

2) The Distribution of Respondents by Age

No	Age	Frequency	Percentage (%)
1.	60-69 yo	27	56,25
2.	70-79 yo	21	43,75
Total		48	100

The above data shows that 56,25% or 27 of the respondents experiencing depression were in the age of 60 to 69 years old.

3) The Distribution of the Respondents by Education Level

No	Educational	Frequen	Percentage
1.	Elementary School (SD)	30	62,5
2.	Junior High School (SMP)	12	25
3.	UMA	6	12,5
Total		48	100

The above data shows that 62.5% or 30 respondents experiencing depressions were respondents having Elementary School (SD) as their educational background.

4) The Distribution of the Respondents by Religion

No	Religion	Frequency	Percentage (%)
1.	Islam	48	100
Total		48	100

The data above shows that 100% or all the respondents experiencing depression were moslem.

5) The Distribution of the Respondents by Marital Status

No	Marital	Frequency	Percentage
1.	Married	48	100
Total		48	100

The data above shows that 100% or all the respondents experiencing depression have married.

B. Specific Data

1) The Distribution of Depression levels before Applying TAK

No	Depression	Frequenc	Percentage
1.	Mild	13	27,1
2.	Moderate	25	52,1
3.	Severe	10	20,8
Total		48	100

Table above shows that 25 respondents (52.1%) experience moderate depression and 10 respondents (10%) experience severe depression.

2) The Distribution of Depression levels after applying TAK

No	Depression Levels	Frequenc	Percentage (%)
1.	Mild	19	39,6
2.	Moderate	15	31,2
3.	Severe	2	4,2
Total		48	100

Table above shows that 19 respondents (39,6%) experience mild depression and 2 respondents (4,2%) experience severe depression.

3) The Distribution of Depression Levels before and after Applying TAK

No	Depression Levels	Mild	Moderate	Severe	Normal	Percentage (%)
1.	Before	13 27,1 %	25 52,1 %	10 20,8 %	0 0%	48 100%
2.	After	19 39,6 %	15 31,2 %	2 4,2 %	12 25%	48 100%
Z= -4.270 P= 0,000						

The data above shows that 25 respondents (52.2%) before being applied group therapy activity (TAK) – sensory stimulation experienced moderate depression, while 19 respondents (39.6%) after being applied group therapy activity (TAK) – sensory stimulation, they experienced mild depression.

DISCUSSION

1) The Depression levels of the elderly before giving Group Therapy Activity (TAK)

The data showed that all elderly in UPT Pasuruan elderly social services Babat – Lamongan before being given group therapy activity, there were still 13 respondents getting mild depression (27,1%), 25 respondents getting moderate depression (52,1%), and 10

respondents getting severe depression (20,8%). In fact, elderly experiencing depression can be caused of some factors, such as gender, educational level and physical illness.

Depression in the elderly is manifested by complaint of feeling worthless, excessive sad, depressed, demoralized, feeling empty and even committing suicide (Yosep, 2007).

More than fifty percent of the elderly in UPT Pasuruan elderly social services Babat – Lamongan experiencing moderate depression. It is because old women has different pattern to communicate with men. They often think it loud and tend not to communicate it to others so their emotion becomes unstable that often lead to depression (Towensend, 2008). In the elderly phase, depression is associated to daily activities. Active elderly will be difficult to get depression than those who are passive. To prevent depression in the elderly, nurse can provide positive activities, for example group therapy activities, exercise, getting together so that there is good communication between nurses and the elderly.

According to Stuart & Laraia cited by Keliat, that group can be a therapeutic tool. Group is a unique social system which can be defined and studied. Definition group is gathering of individuals having relationship one with another, being interdependent and having the same norms.

The level of depression experienced by respondents which has no changed is because of not applying group therapy activity (TAK). Whereas, group therapy activity (TAK) can provide a stimulus for respondents who are depressed by having discussion together led or directed by a trained health worker.

Group activity therapy is one of modality treatment that is very important to be implemented because it will help the members to interact each other and can lose feeling of sadness, depressed, dispirited, worthless, hopeless even to the feeling of wanting to commit suicide since group therapy activity can stimulate them to communicate and discuss each other that they can show their hidden feeling during their depression time.

2) The level of the Elderly Depression After Cast Activity Group Therapy (TAK)

Group is gathering of individuals having relations one to another, being interdependent

and having the same norms (Stuart & Laraia quoted Keliat 2001, 2005).

Group therapy is a psychological therapy that is performed in groups to provide stimulation for patients with impaired interpersonal (Joseph, 2008). TAK is composed of four types, those are: stimulation of cognitive/perceptual, sensory stimulation, reality orientation, socialization.

The data shows that 19 respondents (39,6%) before being applied group therapy activity (TAK) – sensory stimulation experienced moderate depression, 15 respondents (31,2%) experienced moderate depression, 2 respondents (4,2%) experienced severe depression, and 12 respondents (25 %) didn't experience any depression (normal).

This result is consistent with the general purpose and special purpose of group therapy activity that respondents may respond the sensory stimulation given, they are able to respond to the sounds heard, they are able to respond to the images seen, and they can express their feeling through pictures. According to Stuart & Laraia 2005, there were three sessions of TAK – Sensory Stimulation, those are 1) Listening to music, 2) Drawing; 3) Watching TV / Video. It is indicated by a decrease in the level of depression experienced by respondents after given TAK – Sensory Stimulation. From these results it can be concluded that by applying group therapy activity – sensory stimulation is very influential on the level of depression experienced by respondents. It showed that group therapy activity is very effective and very useful for respondents who experienced depressed.

3) The Effect of TAK – Sensory Stimulation to the Depression Levels Of the Elderly

The data of analysis by Wilcoxon Sign Rank Test, with $\alpha = 0.05$ $p = 0.000$ in which it means $p < 0.05$ that H1 is accepted. It can be said that that there is a significant effect of group therapy activity (TAK) – sensory stimulation toward the level of depression of elderly in UPT Pasuruan elderly social services Babat – Lamongan.

The result is consistent with the general purpose of TAK – sensory stimulation that the respondents may respond to the stimulus of senses given and it is also in accordance to the specific purpose of TAK – sensory stimulation that the respondents are able to respond to the

sound heard, the respondents are able to respond to the images seen, and they are able to express feeling through pictures.

The result shows that group therapy activity (TAK) – sensory stimulation can stimulate respondents who are depressed positively. Respondents that could not do anything toward their problems before giving that treatment, now after getting the treatment they tend to solve it (Maryam, 2011). Besides, the respondents experiencing severe depression, after giving treatment of TAK – sensory stimulation, their depression tends to get lower.

CONCLUSION

Based on the results of the study conducted in UPT Pasuruan elderly social services Babat – Lamongan on February 2015, the conclusion can be stated the depression levels of the elderly before given the treatment of group therapy activity (TAK) – sensory stimulation was some of them experiencing moderate depression. The depression levels of the elderly after given the treatment of group therapy activity (TAK) – sensory stimulation were most of them experiencing mild depression. There is a significant effect of giving group therapy activity (TAK) – sensory stimulation to the depression levels of the elderly In UPT Pasuruan Elderly Social Services Babat – Lamongan. Based on the result stated, there are some suggestions from the researcher, as follows:

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THE RELATIONSHIP BETWEEN NUTRITIONAL KNOWLEDGE AND NUTRITIONAL STATUS OF EDERLY IN TAMBAR JOGOROTO JOMBANG

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ABSTRACT

Introduction: Knowledge about nutrition in the elderly can affect nutritional status in older adults. To determine a person suffering from a deficiency or excess weight, using a valuation Body Mass Index (BMI). I calculate by dividing weight in kilograms (kg) by height in meters squared and (m²). **Method:** Research designs used are analytical descriptions. Sampling technique used was cluster sampling with a sample of 74 respondents. Independent variables of this study is the knowledge about nutrition in the elderly and dependent variables of this study is that the nutritional status in older adults is measured using the Body Mass Index (BMI). Using data collection tools and the comparison value quisioner Body Mass Index (BMI) elderly and the data analyzed using *spearman Rho* correlation test with $\alpha = 0.05$. **Results:** The results of analysis of data from 74 respondents were knowledgeable both were 26 respondents (35.1%) with normal nutritional setatus (18.5 to 25.0), and 2 respondents (2.7%) knowledgeable about the nutritional setatus normal (18, 5 to 25.0). For the less knowledgeable respondents as many as 12 respondents (16.2%) with more nutritional status (> 25) and 1 respondent (1.4%) both of which have a knowledgeable nutritional status of older (> 25). After the test values obtained *spearman Rho* $\alpha = 0.014$ ($\alpha < 0.05$) means that there is a relationship between nutritional knowledge of elderly on nutritional status in older adults with the elderly in the village of tambar, Sub District Jogoroto, Jombang District. **Conclusion:** However, increasing the value of Body Mass Index (BMI) is not only influenced by knowledge of the elderly, but other factors also influence such as: economic and social factors, age factors, psychological factors, and the cause of acute or chronic illness.

Keywords: *Knowledge of the Elderly, Nutrition and Body Mass Index.*

GINGER THERAPY TO REDUCE PAIN IN ELDERLY WITH OSTEOARTHRITIS

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ABSTRACT

Introduction: The aging process is a natural biological process which can't be avoided, and running continuously. It will lead to changes in anatomical, physiological, and biochemical in the body, so it will affect the body's ability to function and overall. Osteoarthritis (OA) is a degenerative joint disease that is most common and often lead to an inability with symptoms such as joint pain, stiffness, and limitation of movement. Studies in experimental animal, mice proved that ginger extracts have anti-inflammatory substances. The purpose of this study was to determine the effect of ginger compress in elderly patients with OA, based on some of the existing literature. **Method:** we get three literature after going through the PICO strategy and selection of appropriate literature topics we find. The study design of the three journals using different designs include phenomenology; qualitative research; observational studies and case studies. The population of each journal was: 1) Journal A: 10 people with OA, over the age of 45 years, 2) Journal B: 20 people with OA, with an average age of 64 years (80% women), 3) Journal C, consists of: 56 patients with knee or hip OA (average age 66 years; 73% women), 120 patients with knee or hip OA (average age 58 years, 26% women), and 29 patients with knee OA (average age 62 years, 79% women). **Results:** The results of the literature review of the three journals is a topical treatment or a compress of ginger has the potential to relieve symptoms, improve overall health, and increase the independence of people with chronic osteoarthritis. There is no significant effect in patients with OA in the knee or hip. **Discussion:** Further research is needed to design of research, instrument, and ginger doze needed for safety and effectiveness

Keywords : Ginger therapy, Pain, Osteoarthritis, Elderly

COMBINATION EFFECTS CELERY AND CARROTS TO DECREASE BLOOD PRESSURE IN THE ELDERLY WITH HYPERTENSION GRADE I

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ABSTRACT

Introduction: Elderly is the end of a person's growth process and suffered a setback in terms of physical. Physiological changes from the aging process is the loss of elasticity of arteries which causes an blood pressure increase. The Alternative treatment of hipertention is to use non-pharmacological therapy. Celery and carrot is a natural herbal plants which have active and efficacious compounds to lower blood pressure. The purposes of research was to determine the effect of the combination of water celery and carrot juice on blood pressure in elderly with Hypertension Grade I. **Method:** The method used is quasy experiment with one group pre-test and post-test. The sample was elderly with hypertension degrees I. This study using concecutive sampling technique Non Random n = 33 samples. Data collection is done by measuring the blood pressure before and after the administration of a combination of celery juice (20 g) and carrots (100g) of 200 ml. Data processing is performed by t test-dependent with univariate and bivariate analysis. **Result:** The results showed the influence of a combination of water celery and carrot juice on blood pressure. The average reduction systolic pressure was 17.24 mmHg, p-value = 0.0001 and an average decrease diastolic pressure was 11,79 mmHg, p-value = 0.0001. **Conclusion:** The results, the researcher suggest to health workers in health centers to improve non-pharmacological management of such a combination of water celery and carrot juice as complementarytherapy in patients with hypertension.

Keywords : *Blood Pressure, Celery, Carrots, Elderly, Hypertension*

THE CORRELATION ABOUT KNOWLEDGE OF DEATH AND LEVEL OF SPIRITUAL ACTIVITY TO ELDERLY IN NURSING HOME

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ABSTRACT

Background: Knowledge of death is a process to get personal death definition that in the future become basic of decision to choose death adaptation. For some people death is something screaming. The aimed of this study was to know about the relationship between knowlegde of death and level of spiritual activity to elderly in UPT PSLU Magetan. **Method:** Design of this study used descriptive correlational. The population of this study were all elderly male in UPT PSLU Magetan. The number of population were 39 elderly and the sample were 27 elderly. The Independen variabel was knowledge of death and the dependen variabel was level of spiritual. The data was collected with qestionaire and observation than analized and tabulated. **Result:** The result of this study was majority elderly knowledge of death (63%) was good and majority elderly do the spiritual activity (70,4%). The result of *Spearman Rank (Rho)* test showed that there was relationship between knowledge of death and level of spiritual activity with level of significant 0,04 and correlation coeficient 0,394, it means this study has low correlation. **Conclusion:** The conclusion of this study there was a correlation between knowledge of death and level of spiritual activity in elderly in UPT PSLU Magetan. Hopely all elderly care to increase spiritual activity so that the behavior in their life and knowledge of death be good.

Keywords : *Knowledge of death, Spiritual activity, Elderly*

IMPLEMENTING MANAGEMENT OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) AT SEMARANG MEDICAL CENTER

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ABSTRACT

Introduction: Continuing Professional Development (CPD) of nurses is an essential process to improve professional nursing staff. Implementation of CPD is the purposeful maintenance of knowledge and skills in nursing practice. The purpose of this study examines the implementation of continuing professional development at SMC Telogorejo Hospital Semarang. **Method:** The study was conducted using a qualitative method of phenomenology. Data were collected by focus group discussions, in-depth interviews, observation and documentation study. Data were analyzed using a content analysis. **Result:** The result of this study showed that CPD activity at SMC Telogorejo hospital had included inservice education, mandatory activities, presentations of nursing care, seminars, training, research, and social program. The learning method of CPD was bedside teaching, mentoring, knowledge transfer with presentations and simulations. CPD implementation was influenced by motivational factors and nurses' barriers of workforce arrangement in the inpatient unit. Nursing on call, mapping of nurse's workforce and mutual aid to other units were becoming strategies to overcome these barriers. CPD process at SMC Telogorejo Hospital consisted of the stage of identification, planning, implementation and evaluating, and provided the personal feedback as input for the identification needs in the upcoming CPD. **Discussion:** The nursing committees and the management of nursing necessarily make a systematic plan of CPD according to the needs of each individual nurses, the hospital needs and the development of science and technology. Developing of the evaluation method can assess the quantity and quality of CPD activity to enhance the competence of nurses that is necessary in the future nursing profession.

Key words: *continuing professional development, quality health services, a profession knowledge and skills*

THE CORRELATION OF THERAPEUTIC COMMUNICATION AND PATIENT SATISFACTION AT KERTABUMI ROOM, DR. WAHIDIN SUDIRO HUSODO HOSPITAL, MOJOKERTO

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ABSTRACT

Introduction: Therapeutic communication is a means for nurses in building mutual trust and to increases client satisfaction, so it can provide good image for health professionals, especially nursing profession. The purpose of this study was to determine the connection of Therapeutic communication and patient satisfaction at Kertabumi in Dr. Wahidin Sudiro Husodo Mojokerto Hospital. **Method:** The design that was used to research in this study was an analytic correlation with of cross sectional study type. The sample used was purposive sampling. **Result:** The result showed good therapeutic communication nurse was 27 respondent (79,4%), while for patient satisfaction, 34 respondent (100%) were satisfied. From the analysis using Sperman Rho, probability value 0,000 ($p < 0,05$), this means there was a connection between therapeutic communication with patient satisfaction. It also found a correlation coefficient of 0,576, the connection between therapeutic communications with patient satisfaction in the strong category. **Discussion:** Conclusion Based on the result of this study at Kertabumi in Dr. Wahidin Sudiro Husodo Mojokerto Hospital • fs are expected to maintain and improve of therapeutic communication for nurses to build optimal nursing.

Keywords: *therapeutic communication, patient satisfaction, nurses*

INTRODUCTION

All individual have basic needs to establish relationships with others in their life. Communication is an important component in the practice of nursing. Listen to the feelings of the patient and explain the procedures of nursing are examples of communication techniques performed by nurses during practice (Mundakir, 2006). In the process of nursing , communication is meant to change the behavior of patient to achieve optimal level of health. Communication in nursing is called therapeutic communication (Suryani, 2005).

Therapeutic communication is one of interpersonal communication with starting point to provides understanding between nurse and the patient. The basic problem of this communication is a mutual need between nurses and patients. (Mundakir, 2006). Patient satisfaction is the first indicator of the standard quality of the hospital. Patients will be satisfied if the quality of health care acquired equals or exceeds expectations, and on other way unsatisfied is the answer when the performance of health services is less than expected. Phenomena on the field shows that nurses often doesn't give therapeutic

communication when interacting with patients, for example when the nurses do nursing care, nurses did not introduce themselves, and lack of response to patient feedback feeling. Nurses must communicate with therapeutic communication to the patient in order to make patient gain trust and feel satisfied.

Results of research that conducted by Bolla (2008) about the connection of therapeutic communication between nurse and patient satisfaction level indicates that the good communication therapeutic nurse is 9 nurses (56, 3%) and the implementation of therapeutic communication nurse not good by 7 nurses (43, 8%) in other hand, level of satisfaction of patients shows that 10 patients are satisfied (62, 5%), and 6 patients (37, 5%) are not satisfied.

Laode's research results (2012) about the relationship of therapeutic communication with patient satisfaction shows that good therapeutic communication and 28 respondents (68.3%) patient are satisfied , 2 respondents (4.9%) stated therapeutic communication is good but unsatisfied , 4 respondents (9.7%) expressed unfavorable therapeutic communication but oddly satisfied, and 11

respondents (26.8%) expressed unfavorable therapeutic communication and are unsatisfied. Researchers conducted a Preliminary Study on November 11th 2014, through interviews at Kertabumi room of Dr. Wahidin Sudiro Husodo General Hospital Mojokerto against seven patients, 3 people claimed they were satisfied with services of the communication therapeutic nurse and nurses are reachable when needed, 1 person stated nothing special in communication therapeutic nurse and 3 people expressed less satisfied with therapeutic communication nurse because there were nurses who did not introduce themselves, less friendly and less response to patient feedback feeling.

From the problems that occur, the solution is a nurse should be able to enhance the capabilities and knowledge from experience gained on a therapeutic communication, skills in communication and provide communication in accordance with the principles of therapeutic communication because the communication which is good and right to the patient can give satisfaction to the patient.

METHOD

Subjects in this study were patients who were treated at the Kertabumi Room Dr. Wahidin Sudiro Husodo General Hospital Mojokerto in total 34 people. This study was a cross sectional study in which all data were taken in the same time. Research Instrument are questionnaires which distributed to all

recipients. Questions on the questionnaire consist of 20 questions and the communication on patient satisfaction questionnaires are 25 questions using a Likert scale. Data Analysis that used are Spearman rho correlation test.

RESULTS

Based on gender, subjects were 17 male respondents (50%) and 17 female respondents (50%), most of them are work (61.8%), and 38.2% of subjects were 26-32 years old, education level showed 47.1% with education senior high school / MA.

Based on data obtained regarding the therapeutic communication on 27 subjects (79.4%) said a good therapeutic communication, patient satisfaction showed 34 respondents (100%) are satisfied, and from the Cross Tabulation Therapeutic Communication And Patient satisfaction can be seen that 27 respondents (79, 4%) have good therapeutic communication, 34 respondents (100%) are satisfied.

Spearman's Rho values obtained Significance (2-tailed) or p value 0,000 (for p value <0.05), then H0 rejected and H1 accepted, it is mean there is relationship between therapeutic communication with patient satisfaction in Kertabumi Room Dr. Wahidin Sudiro Husodo Mojokerto General Hospital. Spearman correlation coefficient values are 0.576 which indicate that the direction of a positive correlation with the strong correlation.

Table 1. Cross Tabulation Therapeutic Communication With Patient Satisfaction in Kertabumi Room Dr. Wahidin Sudiro Husodo Mojokerto General Hospital, May 2015

Therapeutic Communication	Patient satisfaction									
	Very dissatisfied		dissatisfied		satisfied		Very satisfied		Total	
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%
bad	-	-	-	-	-	-	-	-	-	-
enough	-	-	-	-	7	20,6 %	-	-	7	20,6 %
good	-	-	-	-	27	79,4 %	-	-	27	79,4 %
Total	-	-	-	-	34	100%	-	-	34	100 %

Tabel 2. Statistics Results of Therapeutic Communication With Patient Satisfaction in Kertabumi Dr. Wahidin Sudiro Husodo Mojokerto General Hospital, May 2015

Correlation				
			Therapeutic communication	Patient satisfaction
Spearman's rho	Therapeutic communication	Correlation Coefficient	1.000	.576**
		Sig. (2-tailed)	.	.000
		N	34	34
	Patient satisfaction	Correlation Coefficient	.576	1.000
		Sig. (2-tailed)	.000	.
		N	34	34

** . Correlation is significant at the 0.01 level (2-tailed)

DISCUSSION

Therapeutic communication performed by nurses can be considered good, average, or low based on several influence factors, those are, perception, values, emotional, socio-cultural background, knowledge, roles and relationships, environmental conditions (Mundakir, 2006). From the data above showed that half of the respondents which were 17 male respondents (50%) and the rest are 17 female respondents (50%), each gender has different communication styles . Tanned (1990) states that women and men have different communication styles. Since 3 years old women play with their best friend or in small groups and use language to seek explanation, minimize differences, and establish and support intimacy. Men on the other hand, use language to gain independence from the activity within the larger group, if they want to be friend, they will do it well. In the implementation of therapeutic communication basically men and women have the same hopes and deserve a good therapeutic communication in the delivery of the messages as well as the actions and nursing care services.

The data show based on occupation, 21 respondents (61.8%) are working, respondents have variety job. Data based education 16 respondents (47.1%) had senior high school / MA. According Mundakir (2006) communication is difficult difference level of knowledge of the communicators is exist. A nurse will be easier to tell or explain the causes of rising blood sugar levels to diabetic patients who have knowledge about their disease than to explain to laymen about their health or illness they suffered. On the first

communication, it will create a feedback (feedback) resulting in active communication, but in the second case, the communication tend to be in one direction because a small chance that feedback will be happened. Delivery of therapeutic communication on nurse and patient is also affected by the knowledge which connected to their education and occupation level, the person whose level of education is high and people who has job have better knowledge to understand and in the delivery of an information or therapeutic communication and feedback will be mostly happened, in other hand those with low education level and those who are unemployment have low level of knowledge, so in the delivery of an information or therapeutic communication nurse will have a small possibility of feedback.

Data by age, subjects in range 26-32 years old were 13 respondents (38.2%). According to Potter & Perry (1993) in order to communicate effectively with someone, nurses must understand the influence of age both in terms of language, as well as the process of thinking of the person. In the delivery of therapeutic communication nurse and patient is also affected by the developments in connection with age, which is generally at a young age to receive a message or information in therapeutic communication was less than in the older age because older people more experiences so as to receive a message or get it better.

From the results of the questionnaire implementation of therapeutic communication in Kertabumi Dr. Wahidin Sudiro Husodo Mojokerto General Hospital answers of each indicator is on the average 28.2 of termination stage. According Stuart & Sundeen (1995) in

the termination stage therapeutic communication activities performed by nurses that summarize the results of the interview, follow up with the client, perform the contract (time, place and topics), concluded the interview with a good way. Implementation of therapeutic communication in termination step by creating an atmosphere of separation, for example at the time of shift change will make the relationship of nurses with patients more closely and harmoniously so that the achievement of the expected results from the beginning to the end of the nurse-patient achieved and the patient will be satisfied

The data it can be seen that out of 34 respondents said they were satisfied entirely as much as 34 respondents (100%). Patients who are satisfied is a very valuable asset because if they are satisfied they will continue to use the services, but if patients are not satisfied they will spread about bad experiences two times more powerful to others (Junaidi, 2005). According to (Pohan, 2006) nurses in providing nursing care can not be separated from the attitude and behavior in communicating with patients that may affect patient satisfaction, although the service infrastructure is often used as benchmarks by patients, the main measure of assessment remains the attitude and behavior of service displayed by officers.

In data based on patient satisfaction survey results showed 34 respondents (100%) are satisfied in therapeutic communication in Kertabumi Wahidin Sudiro Husodo Mojokerto General Hospital which means all 5 groups characteristic in evaluating the quality of services can be enjoyed well, can be seen from the fact: there is room for nurses nearby, empathy: providing the right information, to be assertive in communicating and understandable, responsive: responding to the needs of patients, showing readiness on service and responsive, reliability: provide services in accordance with the time that has been promised by the patient, certainty: make the patient comfortable and safe.

From the results of the patient satisfaction questionnaire in Kertabumi Dr. Wahidin Sudiro Husodo Mojokerto General Hospital average number of answers of each indicator value of at least average-value (109.6) is about reliability. According Nursalam (2011) reliability is the ability to provide the promised services, reliable,

accurate and consistent. Patients will be satisfied if the services provided nursing care which give by nurse can answer from the desired expectations of patients according to nursing services that have been promised.

After analyzed by calculation using Spearman's Rho Significant values ??obtained (two-tailed) or pvalue 0,000 (for p value <0.05) H0 and H1 accepted meaning There Therapeutic Communication Relationship With Patient Satisfaction at room Kertabumi Dr. , Wahidin Sudiro Husodo Mojokerto. General Hospital.

Based on data tabulated results obtained 27 respondents (79.4%) stating both the implementation of therapeutic communication and obtained 34 respondents (100%) expressed satisfaction with therapeutic communication. One of the factors that affect patient satisfaction is the quality of service, where a patient will be satisfied if they get good service or as expected. Satisfaction emerged from the first impression when the patient entered the hospital, for example, fast service, responsiveness, and hospitality in providing nursing services (Budiastuti, 2002).

From these results it can be seen that patient satisfaction is closely associated with therapeutic communication nurse applied in dealing with patients. The better the therapeutic communication, the more satisfied patients, whereas therapeutic communication that is less then the patient satisfaction will also be reduced.

Based on the data found 7 respondents (20.6%) in the implementation of therapeutic communication and the nurse were quite satisfied. According Budiastuti (2002) in addition to the quality of service, other factors that affect patient satisfaction is communication that ordinance information provided by the service provider and how the complaints of patients quickly accepted by the service provider, especially nurses in providing relief to the patient's complaints. For example the call button on the inpatient unit, the space sufficient information to information that will be needed hospital service users, as well as the families of patients who visit the hospital. These all because the patients are satisfied with the facilities and pre existing facilities in hospitals, such as the availability of rooms hospitalization were comfortable and the bathrooms are complete for patients, ease in costs for patients who use health insurance, as

well as ease the patients get the drug and information services adequate.

CONCLUSION

There is correlation between therapeutic communication with patient satisfaction in the strong category.

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DISCHARGE PLANNING AS THE EFFORT TO IMPROVE READINESS TO RETURN HOME IN STROKE PATIENTS

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ABSTRACT

Introduction: Stroke is the main cause of the highest death and disability in Indonesia. The secondary prevention effort to prevent the re-attacks should be started early before the patients return home from the hospital. This effort can be done by providing discharge planning. The purpose of this research is to determine the effect of *discharge planning* to the readiness of returning home in stroke patients. **Method:** *Quasi Experiment* with *Pre-Post Test Control Group Design* approach. The subjects were divided into two groups: the treatment group and a control group. Data were analyzed using the *Wilcoxon Signed Rank test* and *Mann-Whitney* with $\alpha = 0.05$. **Results:** The research results of the treatment group showed that $p = 0.001$, the control group showed $p = 0.139$, and the Mann-Whitney test results showed the significance of $p = 0.000$ ($\alpha = 0.05$) which means that there are differences in the effect between the treatment and the control group. **Discussion:** The providing of *discharge planning* in the beginning of admission, during treatment and before leaving the hospital can improve the readiness of returning home in stroke patients so that the patients can have independent treatment at home and prevent the severity of the disease, the threat of life and the physical dysfunction.

Key words: discharge planning, readiness of returning home, stroke patients

INTRODUCTION

Stroke is a disease that requires a long-term care (long-term support), it is because there is a high level of dependency of stroke patients on others due to the weakness or the disability both psychologically and physically as a result of the unreadiness of the family and patients in continuing the care of patients at home. The lower level of readiness of stroke patients in providing care at home can occur because of the inadequacy of knowledge or information acquired during hospitalization either by doctors, nurses and other health workers (Anshori, 2010).

Stroke is the primary neurologic problem in the US and in the world although the prevention efforts have been done in recent years. Stroke is the highest leading cause of death and based on WHO data the highest leading causes of death in Indonesia in 2014 were: Cerebral Vascular disease / stroke as many as 289.917 then Coronary Heart Disease as many as 209.360 people, and the third was TBC as many as 108.763 people. Medical records of RSUD dr. Soedono Madiun indicated that the highest disease in 2014 was kidney failure as many as 2179 (23%), cerebrovascular disease as many as 2007 cases (21%),

trauma of head as many as 1850 (19%) and the highest cause of death is a Renal disorder which is 30%, continued by 29% of stroke and 27% of heart disease.

Based on the results of preliminary studies by conducting interviews with nurses and staff in the stroke unit of RSUD dr. Soedono Madiun the implementation of the Discharge Planning is done for administrative completeness of the records of patient's home resume. The information provided ranges of time control information, how to take the medicine and some changes of lifestyle that must be done. The giving of information is given in a very limited time when the patients want to return home from the hospital, it is not arranged in adequate health education so that it has the impact on the knowledge and ability of the patient to continue the treatment. The preliminary studies which was done toward 25 stroke patients who were treated, it was obtained that 15 of them have ever been treated for a stroke. The patients expressed that they did not know well about the care that must be followed and allowed to return home. Patients were only given medicine that should be taken, when they did to control and what food to avoid. While the other 10 patients were the

patients who first hospitalized who did not have sufficient knowledge or experience in terms of treatment in stroke patients.

The failure to provide and document the planning of returning home will be at risk of disease severity, life threats, and physical dysfunction (Nursalam, 2014). Therefore, it is necessary to do discharge planning from the the beginning of hospitalized time, during the care and before returning home to prevent recurrence with the more severe problem.

The readiness of patients in facing the returning home plan can be provided by increasing knowledge (cognitive) about illness, the treatment that should be carried out and the problems or complications that may occur as well as changes in attitudes (affective) and behaviors (psychomotor) of patients and families in identifying factors that aggravate the condition or speed the healing and it can arrange home care needs (Anshori, 2010). The readiness can be measured using RHDS (readiness Hospital Discharge Scale) developed by Weiss and Peacentine (2006), which consists of personal status assessment, knowledge, coping, and social support

(Wahyuni, 2012). The purpose of this research is to determine the effect of *discharge planning* to the readiness of returning home in stroke patients.

METHODS

This research is Quasi Experiment with Pre-Post Test Control Group Design approach. The independent variables in this research is *discharge planning* and the dependent variable is the readiness of returning home. The subject of the research is all stroke patients admitted to the Stroke Unit in RSUD dr. Soedono Madiun that requires the criteria of 30 respondents using purposive sampling technique. The subjects were divided into two groups, the treatment group was given early *discharge planning* in the beginning of admission, during the treatment and before leaving the hospital (n = 15) and a control group were given a discharge planning in accordance with the Stroke Unit (n = 15). The data was obtained through a RHDS questionnaire, then the data were analyzed using the Wilcoxon Signed Rank test and Mann-Whitney with $\alpha = 0.0$

Table 1. The Characteristics of Research Subjects and Homogeneity

Variable	Control Group		Treatment Group		P Value	
	F	%	F	%		
Age						
1	41 – 60	11	73	8	53	0,067
	> 60	4	27	7	47	
Education						
2	University	5	33	5	33	0,069
	Senior High School	6	40	6	40	
	Elementary School	4	27	4	27	
Occupation						
3	Doesn not work	7	46	2	13	0,926
	PNS/TNI/Polri	6	40	8	53	
	Private	1	7	4	27	
	Farmer	1	7	1	7	
Sex						
4	Male	7	47	6	40	0,224
	Female	8	53	9	60	
5	Types of stroke					
	infarction	13	52	48	80	0,345
	haemorrhagic	2	40	3	60	

RESULTS

Based on table 1. The result shows that there is no significant difference in characteristics between the control group and the treatment. It can be seen from significant value (p) from all respondents characteristics is bigger than value

$p > 0,05$. It means that one of the requirements to conduct a research is accomplish, since the earlier respondents condition from both groups has a balance subject characteristics, or in other word both groups are homogeny.

Table 2. Effect of Discharge Planning Preparedness Against Round at Stroke Patients, Madiun December 2015

No Resp.	Control Group		Treatment Group	
	Pre	Post	pre	post
1	75	88	86	164
2	75	89	90	187
3	84	89	87	185
4	77	80	95	189
5	78	76	72	197
6	78	78	88	196
7	78	78	90	200
8	82	81	89	209
9	76	78	90	191
10	78	78	84	198
11	72	76	86	197
12	80	73	84	192
13	71	72	91	199
14	91	91	89	207
15	75	75	88	203
Wilcoxon Sign Rank Test	p = 0,139		p = 0,001	
Mann-Whitney Test	p = 0,000			

Based on table 5.2 above it can be seen that the analysis result of statistical test of Wilcoxon Sign Rank Test in the control group the significance gained is 0.139 ($p > 0.05$) which shows there is no effect of the readiness of the patients to return home, while the treatment group which is given *discharge planning*, the significance obtained is 0.001 ($p < 0.05$) which shows that there is an effect of the readiness of the patients to return home in stroke patients. The result of significance of Mann-Whitney test is 0.000 ($p < 0.05$) which means that there are differences in the effect of discharge planning on readiness of returning home in stroke patients between the treatment group and the control group.

DISCUSSION

The results of the research shows that the readiness of returning home of stroke patients who are admitted in the Stroke Unit before they are given a discharge planning either in the control group or in the treatment

group is in the category of half-ready (scale 72-161). It occurs because when the patients are hospitalized they have not received much information about the treatment and the disease. The readiness relates to the abilities, they are knowledge, experience, skills and relates to a desire which includes belief, commitment and motivation to complete a task or certain activity (Martinsusilo, 2007).

After the discharge planning is done, The readiness to return home of the treatment group is almost increase entirely from half ready to be very ready to return home. The result of the significance of Wilcoxon statistical test obtained is 0.001 ($p < 0.05$), it shows that there is an effect of discharge planning to the readiness of the patients to return home. While in the control group, there is no increase in readiness to return home, and statistical results test of Wilcoxon Sign Rank Test shows the significance 0.139 ($p < 0.05$).

The giving of such discharge planning intervention can improve patient's

knowledge, improve coping skills and provide important social support in addition to the treatment (Nursalam, 2014). Meanwhile, according to Jipp and Siras (2007) discharge planning aims to prepare the patient physically, psychologically and socially, to improve the independence of the patients, to improve the continuing care to the patients, to help the patients and the families having the knowledge and the skills as well as the attitudes to improve and maintain the health status of patients (Nursalam, 2014).

The results of the research shows that there is a significant increase of the readiness to return home of the patients after they are given a discharge planning. The method used in the implementation of discharge planning is in the form of lectures and demonstrations accompanied by giving the leaflets containing the materials about stroke and the treatment. Thus, respondents would be easier to understand and comprehend the material that is given to them so that the respondents' knowledge will be increased and the respondents are ready to return home and they can be independent in doing home treatment that can prevent the severity of the disease, the threat of life and physical dysfunction. This is in line with the opinion of Ahmad & Mulyatasih (2008), that the discharge planning in stroke patients during treatment is very important in improving the knowledge and ability of the patient to be independent, improving self-confidence of the patient, minimizing defeat to be as light as possible and preventing repeated attacks.

The statistical analysis using the Mann-Whitney test shows a significance of 0.000 ($p < 0.05$) which means that there are differences in the effect of discharge planning on readiness to return home in stroke patients between the treatment group and the control group. The occurrence of differences between the treatment group and the control group is because the treatment group is given early discharge planning in the beginning of admission, during the treatment and before leaving the hospital, while the control group is given discharge planning in accordance with the Stroke Unit at the time when the patients will return home. The materials of discharge planning that are given to the treatment groups are: 1) in the early entry: the observation of health conditions and health problems, the approximate length of treatment, the doctor /

nurse who are in charge of the treatment, the estimated cost of care, the orientation of spaces and facilities; 2) During the treatment: Diseases and nursing problems faced by the patients, the required supporting examination, doctor therapy and nursing interventions conducted; 3) Before leaving the hospital: The treatment of stroke patients at home, the drugs are still consumed at home, the diet during the patients are at home, the introduction of the critical condition of the patients, and time to check up. While in the control group, the materials of discharge planning including the time to check up, the way to take the medicine and some lifestyle changes that must be done.

Thus giving the discharge planning in the beginning of admission of hospitalized, during the treatment and by the time before the patients leave the hospital is very effective in improving the patient's readiness because there is a two-way communication effectively between the giver of discharge planning and patient that gives chance to the patient to participate in the problem solving process so that the goals of discharge planning can be achieved.

CONCLUSION

Based on discussion the above it can be concluded that there is an effect of *discharge planning* on the readiness of returning home in stroke patients, and there are differences of the effect of *discharge planning* on the readiness of returning home to the treatment group and the control group.

Therefore, it is recommended for the health workers to provide *discharge planning* in the beginning of admission, during the treatment and before leaving the hospital. By giving the *discharge planning* it can improve the readiness of returning home for stroke patients thus the patients are independent in doing home care that can prevent the severity of the disease, the threat of life and the physical dysfunction.

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RELATIONSHIP BETWEEN ORGANIZATIONS, LEADERSHIP AND PATIENT SAFETY: A LITERATURE REVIEW

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ABSTRACT

Introduction: Patient safety is a critical component of health care quality. Patient safety appears to be influenced mainly by management's determination. Management's improvement of the system itself in a more incremental manner is required in the other high-risk ward types. Nurse leaders need to play a larger role in facilitating efficient and effective measures to improve patient safety and well-being. **Method:** A literature search included an electronic database search (PubMed, ProQuest, EbscoHost, Google Scholar, and Science Direct). Access to websites of organizations dedicated to the enhancement of patient safety, organization, leadership, and a manual search of reference lists of the papers included for the period 2010-2015. **Result:** Nurse Managers play a strategic and ethical role in ensuring patient safety. Promoting understanding and awareness of the underlying values and principles of patient safety in the organization. Nurse managers have a role to play in bringing together all disciplines in order to facilitate patient safety. Managers and policy makers should emphasize developing transformational leadership style and ensuring the use of high performance work system (HPWS) as an important organizational strategy to improve patient safety. **Discussion:** Patient safety is actually to be management's prime task. This insight has a special relevance to improve quality care, which must transmit the idea that patient safety is a major leadership concern. Transformational leadership behaviors of nursing managers will influence staff nurses' attitudes toward safety practices and influence their compliance with safety practices.

Key words: patient safety, organization, leadership

INTRODUCTION

Providing high quality safe healthcare is a global challenge for healthcare systems and organizations (WHO, 2011a). Ensuring patient safety is a fundamental principle of healthcare organizations, managers and practitioners' professional responsibility. However, patients continue to experience unsafe care in increasingly complex, high pressure healthcare settings (WHO, 2011a).

Patient safety is comprised of indicators including various items in the literature and among the top of them are patient mortality, failure-to-rescue, pneumonia, pressure ulcers, erroneous medication, patients' accidental falls, and infections (Penoyer, 2010). Patient safety is a critical component of health care quality. The recognition, on the basis of evidence from healthcare and high risk industry, that safety culture plays a vital role in the establishment of

patient safety programmers has led efforts to advance patient safety to focus on developing a strong safety culture (McCarthy and Blumenthal, 2006).

Nurse leaders need to play a larger role in facilitating efficient and effective measures to improve patient safety and well-being. For instance, according to Anderson and Townsend (2015), preventing high alert medication error, the most common error in hospital patients—is often a targeted effort in prevention initiatives, yet goals for reducing errors are rarely reached.

Nurses are transformational leaders with strong leadership skills and vision, and they are help improve patient safety cultures. Cummings et al. (2008) highlighted that leadership practices of formal nurse leaders and managers contribute to positive outcomes for their organization, patients, and health care providers. Nurses must advocate for patient

safety because they spend more time interacting with patients than most other medical personnel. Nurses must have a leadership role to effectively facilitate treatment and ongoing care, and to encourage health promotion. Finally, in the health care sector, the environment has bearing on outcomes such as patient safety (Ngo et al., 2009). The dynamic work environment is what forms the organizational climate of the health service organization and it forms a guideline upon which employees to understand organizational life in the health care organizations (Ngo et al., 2009). Thus, organizational climate can be deemed among the top mediating factors in patient safety context (Walston et al., 2010). The purpose of this literature review was to examine the relationship between the organization, leadership, and patient safety.

METHOD

A literature search included an electronic database search (PubMed, ProQuest, EbscoHost, Google Scholar, and Science Direct). Access to websites of organizations dedicated to the enhancement of patient safety, organization, leadership, and a manual search of reference lists of the papers included for the period 2010-2015. The search was specifically used keyword leadership, organizational and patient safety.

A total of 45 titles located from the sources outlined above were screened for relevance according to the inclusion and exclusion criteria in Table 1. Finally, 17 records were included in the review following full text screening by the first author, with validation by two co-author. Thematic analysis of the literature commenced with the first author carrying out an exhaustive reading of all the papers included.

Inclusion and exclusion criteria for literature selection. Inclusion criteria: Empirical and theoretical literature that focused on the assessment of patient safety, organization, and leadership; Studies using quantitative, qualitative or mixed methods assessing (singular aspects of) patient safety culture in the hospital setting; Literature published between 2010 and 2015; Literature published in English. Exclusion criteria: Literature focusing on studies on assessment of patient safety, organization, and leadership conducted in the hospital setting.

RESULTS

Patient safety appears to be influenced mainly by management's determination of how things are done whereas improvement of the system itself in a more incremental manner is required in the other high-risk ward types. Instrument for assessing patient safety culture (PSC) impact of PSC on clinical quality that compares acute geriatric units with a sample from intensive care, surgery and trauma surgery departments. In the acute geriatric units, higher levels of 'management commitment to patient safety' and lower levels of 'error fatalism' were associated with a reduced incidence of medical errors. In the comparison group, only the variable 'active learning from mistakes' was relevant for safety performance (Johannes S, et al, 2011).

Leadership is a multi-dimensional construct that has been associated with power, influence, management, and prosperity. Leaders are instrumental in guiding, directing, and/or facilitating group advancement and the attainment of goals (Bass & Bass, 2008). The operational definition of leadership for this study is based on Northouse (2007): "leadership is a process whereby an individual influences a group of individuals to achieve a common goal" (p. 3).

Leadership is significantly different from management and while organizations are open to defining management skills for a specific position, they failed to identify leadership skills/attributes needed for the same position. This may be attributed to the fact that the predictive value of the leadership attributes in guaranteeing operational success in terms of organizational outcomes is still ambiguous. Thus, while tacit consensus exists for the effect of leadership behaviors on organizational outcomes like those linked to safety, there is still lack of understanding of the way these behaviors impact outcomes (Joseph & Steensm, 2012). The initial step in determining the effect of these behaviors on the outcomes is to distinguish between leadership and management and to define leadership behaviors on the basis of leadership theories (Eqab, A, et al, 2012). Managers and policy makers should emphasize developing transformational leadership style and ensuring the use of high performance work system (HPWS) as an important organizational

strategy to improve patient safety (Alotaibi, E, 2014).

Leadership style is defined as the leader's behaviors, characteristics, and overt and covert mannerisms that drive the attainment of goals and objectives (Bass & Bass, 2008). Others have suggested that leadership style is the collective beliefs, values, and preferences an individual uses in order to influence others (Abualrub & Alghamdi, 2012; Marquis & Huston, 2009).

Two of the most prominent leadership styles, developed and studied by Bass and Avolio, are transactional and transformational leadership. Transactional leadership is defined as leadership that promotes standard operating procedures and elicits behavior based on exchange relationships (Bass & Riggio, 2005; Bass and Avolio, 1991). In contrast, transformational leadership centers on promoting the intrinsic beliefs and visions of the leader and subsequent adoption of those beliefs by organizational members (Bass & Riggio, 2005; Bass and Avolio, 1991).

Nurse leaders were found to be of critical importance to patients, medical personnel, and the health care system. The guide to improve patient safety. These drivers are (a) leadership, (b) communication, (c) teamwork/collaboration, (d) evidencebased practice (EBP), (e) learning, (f) empowerment, and (g) focus on patient-centered care (Hida, J, 2015).

PCMs (patient care managers) provided data on organizational leadership (formal and informal) for patient safety. Formal organizational leadership for patient safety is an important predictor of learning from minor, moderate, and major near-miss events, and major event dissemination (Liane, R, 2010).

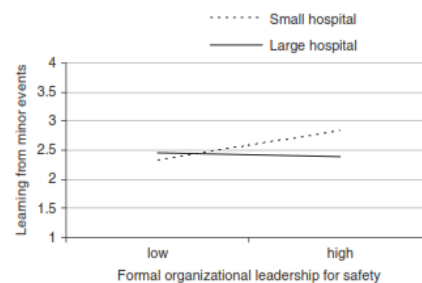
A set of health care institutional practices focusing on the improvement of processes of care that reduce medical errors and mitigate patient harm during the health care experience (Institute of Medicine, 2001; Lindberg, Judd, & Snyder, 2008; Morath & Turnbull, 2005).

Wiegmann, Zhang, von Thaden, Sharma, and Gibbons (2004) defined safety climate as a state of the moment snapshot of safety culture that can be impacted by employee perceptions and attitudes, which is

dynamic and may change in a very short period of time.

Although safety climate and safety culture are often used interchangeably (Edwards et al., 2008; Singer et al., 2007; Singla, Kitch, Weissman, & Campbell, 2006), for this study safety culture is simply the expressed collective attitudes of members of a group regarding safety practices (Duthie, 2010; Mearns, Whitaker, & Flin, 2001, 2003).

In addition to their statistical significance, the magnitude of these interaction effects is meaningful. This picture above shows learning scores for small and large hospitals under conditions of high and low formal leadership.



This picture shows the effect of the interaction between formal leadership and hospital size on learning from minor events and shows that, in small hospitals, an increase of 2 SDs in formal leadership increased learning from minor events by approximately 27 percent. These results lend empirical support to important theoretical papers that have argued that leadership for safety, and a culture where safety is seen as a priority for the organization, is critical for improving safety processes and outcomes (Barach and Small 2000; Reinertsen 2000; Frankel, Leonard, and Denham 2006; Leape 2007). Nasiripour A.A., Masoudi-asl I, and Hesami F (2012) found the significant relation between organization and nurses' overall perception dimensions, feedbacks of nurses' mistakes, no punitive responses to nurses' mistakes, volume of work, patient transferring across wards, and reported events frequency. So the patient safety and patient safety culture can be improved by increasing the participation of staffs, in particular nurses. Liane, R (2010) found that relationship between organization, leadership and patient safety behaviors such as learning from safety events. Formal leadership support for safety is of particular importance in small

organizations where the economic burden of safety programs is disproportionately large and formal leadership is closer to the front lines. Eqab, A, et al (2015) explain this study supported the relationship between transformational Leadership and organizational climate and the relationship between organizational climate and perception of patient safety. Finally, this study confirmed the full mediating effect of organizational climate on the relationship between Transformational Leadership and perception of patient safety. The findings of the study are of a great value to both theory and practice and have important implications for practitioners and policy-makers. Alotaibi, E (2014) found that effective reporting system had significant effect on the frequency of occurrence of negative errors that may threaten patient safety. This study also revealed that the level of organizational climate mediated the relationship between HPWS and overall perception of patient safety. The findings of this study suggest that managers and policy makers should emphasize developing transformational leadership style and ensuring the use of HPWS as an important organizational strategy to improve patient safety.

DISCUSSION

These results have implications as they support the premise leadership and organizational culture to be more transformational in nature than transactional. Significance was found between the leadership perceived and one of the patient safety variables, Organizational resources for patient safety. Health researchers face many challenges as they try to assess “improved patient safety outcomes” and factors or interventions that might lead to these improved outcomes PSEs are not easily defined and measured in health care. Nurse leaders must facilitate a change in culture by educating, mentoring, and supervising the operations of different departments as well as the coordination of services. Nurse leaders integrate services, correct inadequate policies and procedures, oversee performance improvement among medical personnel and in the nursing department, and mitigate medical errors. Transformational leaders must advocate and communicate with strong vision, and be mindful of mutual respect. Nurse leaders convey a strong sense of advocacy and

support on behalf of patients and staff. The seven drivers of patient safety could lead to a myriad of improvements in health care.

CONCLUSION

Ensuring patient safety is actually to be management’s prime task. This insight has a special relevance for improve quality care, which must transmit the idea that patient safety is a major leadership concern. Transformational leadership behaviors of nursing managers will influence staff nurses’ attitudes toward safety practices and influence their compliance with safety practices. Furthermore, the present literature review reveals a need for robust research to clarify how organizational policies that improve patient safety, nursing leadership type in health care should be tackled

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THE EFFECT OF IMPLEMENTATION ON NURSING ROUND AND PATIENT SATISFACTION

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ABSTRACT

Introduction: Nursing professional is a comprehensive service provided to the patient include bio psycho social, economical and cultural. Comprehensive range of services that will make patient satisfaction, nursing service quality will be achieved. The purpose of this study was to determine the effect of implementation of nursing rounds the purpose patient satisfaction. **Method** :The research design used in this study was design One Group Pre Post Test Design. Population as many as 40 respondents in Space Mecca/ Medina room and Adult room Muhammadiyah General Hospital, Gresik. Sampling consecutively obtained 28 samples of research. Instruments used in the form of a questionnaire. Statistical analysis using the Wilcoxon Signed Rank test with significance level $\alpha < 0.05$. **Result:** The results showed there were differences to nursing rounds respondents were less satisfied (72.4%) decreased to (6.9%) after nursing rounds. From the resulted of statistical analysis obtained the value $p = 0.000 < \alpha = 0.05$ means there are effect of implementation of nursing rounds to patient satisfaction. **Conclusion** : The research was expected to nurses routinely to implementation nursing rounds to patients who were treated in accordance with the provisions of the old nursing rounds.

Keywords: *nursing rounds, patient satisfaction*

RELATIONSHIP BETWEEN NURSE CARING BEHAVIOR WITH PATIENT SATISFACTION IN ISOLATION ROOM OF PROF. DR. H. ALOEI SABOE HOSPITAL, GORONTALO CITY

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ABSTRACT

Introduction: Caring of Patients in isolation wards require different treatments with the other wards. Satisfaction related to nurses caring behavior towards Patients. This research aimed to verify the relationship between nurse caring behaviors with isolation patient's satisfaction at G4 ward of Prof. Dr. H. Aloei Saboe Hospital in Gorontalo City. **Method:** This research used descriptive correlative design with cross sectional approach. Sampling technique used non-probability sampling: Consecutive sampling. The population in this research were all patient isolation in isolation wards. Total sample was 29 respondents. The independent variable was the nurse caring behaviors. The dependent variable was the patient isolation. Data were collected by Parasuraman instruments and caring behavior inventory (CBI). Data were Analyzed by Spearman rho test with a significance level of $\alpha < 0.05$. **Result:** The results Showed that the nurse caring behaviors in isolation ward has relation with patient satisfaction ($p = 0.000$) and ($r = 0.364$). **Discussion:** The level of the relationship was low in interpretation. Improving patient's satisfaction isolation can be done by improving and maintaining nurse caring behaviors such as maintaining human values and human altruistic, trusting relationships, problem solving in decision making, always provide supportive, corrective and protective, and help meet basic human needs. Further studies should consider the characteristics used by patients in assessing the quality of hospital care.

Keywords: nurse caring behavior, patient satisfaction, isolation ward

INTRODUCTION

Developments in science and technology today, raises the demands of adequate health care of community services, so that hospitals manage to provide the best service to the community. The principle of improving quality care were improved the quality of service providers, revise services and meet the patients' needs. Improving quality of care is degree to provide efficient and effective services in accordance with professional standards, service standards were implemented fully in accordance with the needs of the patient, utilizing appropriate technology and research results of health/nursing care development in order to achieve optimal health status (Nursalam, 2011). Treatment of patients in isolation wards require a different treatment than the treatment

in the other wards including the strict application of personal hygiene, use of Personal Protective Equipment (APD), and minimal contact with patients. Isolation is the separation of people in such a way to avoid transmission to others (Tamher, 2008). Some of the criteria in the isolation room is a separate room, restrictions on the mobility of patients, and officers wear masks at all times in contact with the patient. Satisfaction refers to the application of the code of professional conduct standards that optimal health care can be seen from the behavior, as well as the skill shown by a nurse or a medical doctor or other health care provider. Shirley (2012) study showed that 82.7% of patients were satisfied with nursing services such as respect for the patient, quiet, gentle, caring, compassion and empathy. In a

preliminary study by conducting interviews in 9 patients in isolation rooms G4, 6 (six) patients said that nurses tend to be less friendly, less cooperative and less interact with each interventions delivery. It can be seen from the Bed Occupancy Rate (BOR) in 2013 was 78%, which still far from hospitals ideal target 85%. So far there has been no effort made to improve hospital nurse caring behaviors. The survey results are not in accordance with the hospital vision: referral hospital with excellent service and hospitals mission that administer health services in a comprehensive manner, develop the professionalism of the employees in a sustainable manner, improve the welfare of employees according to performance, develop a financial management system, develop a management information system based information Technology.

Woodruff and Gardial (2002) theory defines satisfaction as a model of the gap between expectations (performance standards should be) with actual performance received by customers. Kotler (2004) in Nursalam (2011) defines satisfaction as a happy or disappointed feeling of someone who emerged after comparing the perception or impression of the performance or the result of a product and its expectations. Patient satisfaction towards hospital may affect the quality objectives achievement of each wards and minimum service standards, patient satisfaction, and employee satisfaction. Patient satisfaction could form perceptions and could affect the hospital quality. Patient satisfaction has a close relationship with health outcomes, both medically and non-medically as adherence to treatment, medical information understanding and continuity of care. Patients who are not satisfied will tell bad matters to others about their bad experiences and this matter can affect the medical and non-medical personnel welfare. Health care service user satisfaction measurements could be seen from the doctor-patient relationship, service convenience, service effectiveness, and treatment security. Client satisfaction is also closely related with health services quality that performed by nurses with caring behavior.

Caring behavior (Caring act) is an action done in providing support to the individual as a whole (Dwidiyanti, 2007). Patient satisfaction is a very important factor to evaluate the quality of nursing services at the hospital and nurse caring behaviors is one of

the aspects to nursing care, because caring include human relations and affect the quality of care and patient satisfaction. Nurses are members of professional who are permanently and continuously used the phrase of nursing care. Potter (2009) state, that caring was a nurse concern with heartfelt for the patients. Caring, empathy, communication gentleness and compassion of nurses to patients would establish therapeutic nurse-patient relationship. Caring behavior that could not be fulfilled will affect the nurses and patients relationship. If such a situation continues, nursing services provided could not be optimal and quality of nursing services will decline. Based on the explained phenomenon of patient satisfaction, researcher interested to conduct research about the relationship between nurse caring behaviors and patient's satisfaction in isolation ward in Prof. Dr. Aloei Saboe Hospital, Gorontalo.

METHODS

This study aimed to verify the relationship between nurse caring behaviors with patient satisfaction in isolation ward of Prof. Dr. H. Aloei Saboe Hospital, Gorontalo. The study design used was descriptive correlative study with cross sectional approach. The population in this study were all patients in isolation ward according inclusion criteria: were treated since the date of 18 November to 17 December 2014 in G4 ward of Prof. Dr. H. Aloei Saboe Hospital, Gorontalo City as much as 29 respondents. The independent variables in this study were nurses caring behavior. The dependent variable in this study is patient satisfaction in the isolation ward. Data collection used instruments in form of questionnaires. Analysis of the data used is Spearman Rank Correlation with a significance level of $p < 0.05$.

RESULTS

Table 1 Tabulation Results of Nurses Caring Behaviors in G4 (Isolation ward) of Prof. Dr. H. Aloei Saboe Hospital, Gorontalo.

Parameter	Nurses Caring Behaviors				Total
	always	Often	Sometimes	never	
Human values and altruistic	17	8	3	1	29
Build a	18	8	3	-	29

trusting relationship					
The use of the scientific method, problem solving in decision making	17	9	2	1	29
Supportive, corrective and protective towards mental, physical, socio-cultural and spiritual	17	8	3	1	29
Help meet basic human needs	15	10	3	1	29

The results in Table 1 based on data obtained from questionnaires of nurses caring behavior, from total 29 respondents majority (17 respondents) thought that nurse always have human values and altruistic: nurses are sensitive to the patient's condition and immediately respond when patients call or complaints. Three respondents said that nurses sometimes hope that patients recover quickly. 1 respondent said that nurse never gave special attention when patients first entered the room (get to know the environment, such as a neighbor of patients, facilities, etc.). In parameter build a trusting relationship majority of 18 respondents said the nurses would always invoke the name of the patient in accordance with the patient's name or the preferred name of the patient, 8 respondents nurses often speak well to the patient, 3 respondents rate when the patient speaks nurses sometimes listen carefully and nurses sometimes be respect for the patient and family. In addition, the parameters of the scientific method, problem solving in decision making 17 respondents said nurses always know how to provide care to patients in the event of an emergency in isolation rooms, 9 respondents nurses often trained in the use of equipment to provide action, 2 respondents

nurses sometimes nimble in action given to patients, and one nurse respondents do not teach patients about caution against infectious diseases hospital. Parameter supportive, corrective and protective of mental, physical, socio-cultural and spiritual 17 respondents said the nurses always confident when performing an action. 8 respondents said nurses often trying to motivate the patient and family caregivers often give comfort to the patient when the action is taken, and nurses also often give advice to the family when they faced a problem, immediately contact the nurse. 3 respondents nurses sometimes accompany patients during hospitalized (in the isolation ward), and 1 nurse respondents sometimes provide health education on infectious diseases in patients and families. Parameter help meet basic human needs most of the 15 respondents nurses always punctual in delivering action and medicine to patients, 3 respondents nurses sometimes provide assistance in meeting the basic needs of patients and first responder rate the nurses never appreciate the differences in each patient treated in the room.

Table 2 Results of Tabulation in Patient Satisfaction in Isolatio ward of Prof. Dr. H. Aloe Saboe Hospital, Gorontalo.

Parameter	Isolation patients satisfaction				Total
	Very satisfied	satisfied	dissatisfied	Very dissatisfied	
<i>Tangibles</i>	16	9	3	1	29
<i>Reliability</i>	18	8	2	1	29
<i>Responsiveness</i>	15	8	4	2	29
<i>Assurance</i>	19	9	1	-	29
<i>Empathy</i>	18	9	2	-	29

The results in Table 2 based on data obtained from isolation patient satisfaction questionnaire, the majority of the 29 respondents, 16 respondents were very satisfied with the tangible parameters (the fact) that nurses always maintain the neatness and appearance. 9 respondents were satisfied with the nurses maintain cleanliness and readiness of medical devices that are used. 3 respondents dissatisfied that nurses gave information about

the present administration, and one respondent was not satisfied with the nurse maintain cleanliness and completeness of the bathroom and toilet facilities. In parameter reliability (reliability) mostly 18 responder patients are very satisfied that nurse able to address the issue of patient care insulation appropriately and professionally, 8 respondents are satisfied that nurse told clearly about the things that must be adhered to in your treatment, two respondents were not satisfied with the nurses provide information on the facilities available, how to use and order prevailing in the hospital, timeliness nurse arrived in the room when you need. 1 respondents is very dissatisfied with the nurse told clearly about things that are forbidden in your care. In parameter responsiveness (quick response) of 15 respondents were very satisfied with the nurse immediately deal with you when he reached the ward isolation, 8 respondents were satisfied with the nurse to help you to the service implementation chest x-ray and laboratory at the hospital, in four respondents are not satisfied with nurse willing to offer assistance to you when having trouble even without being asked, and 2 respondents were very dissatisfied with the nurses provide a special time to help you walk, defecate, urinate, change sleeping position. In parameter assurance (certainty) majority of 19 respondents were very satisfied with nurse meticulous and skilled in performing nursing actions to the patient isolation, 9 respondents were satisfied with the nurses always greeting and smile when meeting with isolation patients and one respondent was not satisfied with nurse give attention to complaints from patients isolation. In parameter empathy (affinity) majority of 18 respondents were very satisfied with the nurses often look and examine your circumstances such as measuring blood pressure, temperature, pulse, respiration and intravenous fluids, 9 respondents were satisfied with the nurse informs you about all the maintenance actions that will implemented and 2 respondents were not satisfied with the services provided by nurses do not view their rank or status, but based on your condition.

Table 3 Results of Relationship Between Nurse Behavior Caring and Isolation Patient Satisfaction in G4 ward of Prof. Dr. H. Aloei Saboe Hospital Gorontalo.

Isolation Patient satisfaction	Nurse Caring Behaviors				Total	%
	Always	%	Often	%		
Very Satisfied	20	69	4	14	24	83
Satisfied	2	7	3	10	5	17
Total	22	76	7	24	29	100
<i>Spearman Rho</i>	p=0,000					

DISCUSSION

According to the results showed that 7 respondents (24%) rate the nurses caring behavior is often administered to patients in isolation ward and 22 respondents (76%) rate the nurses caring behavior is always given to the patient in the isolation ward in Prof. Dr. H. Aloei Saboe Hospital Gorontalo. The tabulated results in Table 5.1 is based on data obtained from questionnaires the nurses caring behavior, of the 29 respondents majority of 17 respondents thought nurses have human values and altruistic: nurses are sensitive to the patient's condition and immediately respond when patients call or complaints in patients. Patients who judge sometimes as many as three respondents said that nurses the hope that patients recover quickly. 1 respondents rate the nurse never gave special attention when first entered the room (get to know the environment, such as a neighbor of patients, facilities, etc.), seen from demographic data experience hospital treated patients had never been treated before. Caring is central to nursing practice. Potter & Perry (2009) describes THAT caring is a universal phenomenon that affects the way people think, feel, and have a relationship with each other. Clients and families expect a good quality individual relationships of nurses. Conversations that occur between clients and nurses are generally very short and did not describe their relationship. In parameter build a trusting relationship majority of 18 respondents said the nurses would always invoke the name of the patient in accordance with the patient's name or the preferred name of the patient, 8 respondents nurses often speak well to the patient, 3 respondents rate when the patient speaks nurses sometimes listen carefully and nurses sometimes be respect for the patient and family, seen from demographic

data of patients had high school education level. Communication is a collection of individuals who interact with each other so that the problem of communication plays a central role. This research was supported by Sopiah (2009) that good communication creates mutual understanding and to strengthen cohesion and the achievement of the objectives of the group. In addition, the parameters of the scientific method, problem solving in decision making 17 respondents nurses always know how to provide care to patients in the event of an emergency in isolation rooms, 9 respondents nurses often trained in the use of equipment to provide action, 2 respondents nurses sometimes nimble in action given to patients, and one nurse respondents do not teach the patient about the prudence of infectious diseases in the hospital, seen from patient demographic data elementary education.

Increased employee performance is followed by an increase in knowledge and skills. Training and development is an activity to increase knowledge and provide dividends to employees and the company in the form of expertise and skills which in turn will be a valuable asset for the company (Riva, 2009). Parameter supportive, corrective and protective of mental, physical, socio-cultural and spiritual 17 respondents rate the nurses are always confident when performing an action. 8 respondents nurses often trying to motivate the patient and family caregivers often give comfort to the patient when the action is taken, and nurses also often give advice to the family so that when there is a problem, immediately contact the nurse. 3 respondents nurses sometimes accompany patients during hospitalized (in the treatment room isolation), and 1 respondents nurses sometimes give health education on infectious diseases in patients and families, visits from demographic data of patients coming from another tribe, from outside Gorontalo. Transcultural perception expressed Leininger (1988, in Potter & Perry, 2009) emphasized the importance of nurse understanding about cultural services. Nurses need to learn the habits of different cultures in order to identify and meet all the needs of the clients. Parameter help meet basic human needs most of the 15 respondents nurses always punctual in delivering action and medicine to patients, 3 respondents said nurses sometimes provide

assistance in meeting the basic needs of patients and first responder said the nurses never appreciate the differences in each patient treated in the rooms, views of the patient's demographic data sources of financing elementary education. The results of research that supports the lack of nurses caring behavior is the research conducted by Green Halg, Vanhanen and Kyngas (1998) in Morrison & Burnard, (2007/2009) explained that nurse is more indicative of physical caring behavior of the affective. Biological needs a major focus of nurses, so that other needs such as psychological, spiritual and social becomes less attention.

Communications made the isolation nurses and patients in need of values that may be invoked in applying the nurse caring behaviors. To get a trusting relationship with the patient, a nurse must have good communication skills therapeutic. Nurses must be able to distinguish regular communication and therapeutic communication. In building a personal caring nurse may be through the development of indicators 10 caratif caring Watson (1979) in Kaltara (2009) includes: System value a humanistic-altruistic, trust-hope, sensitive to yourself and others, help-relationship of mutual trust, development and acceptance on the expression of positive and negative feelings, use of scientific methods, improved teaching and learning processes in interpersonal, supportive, corrective and protective of mental, physical, sociocultural and spiritual, to help meet basic human needs. Caring behavior (Caring act) is an action taken in providing support to the individual as a whole (Dwidiyanti, 2007).

According to the research 29 respondents were very satisfied with the behavior of caring nurse who always build a trusting relationship with the patient, it is associated with the fact that researchers found that every nurse in the room G4 interacting provide nursing care to patients always call the patient with the nickname patients patients are listed in the book. Nurses are very skilled and tireless airport complaints from patients and families. When nurses nursing action very confident and finish the job well and always communicate with patients and families about the development of the health of these patients. The interaction of nurses with patients is well established indicate mutual respect between one and another, a nurse always respect the

rights of the patient and the patient also understands its obligations.

This is according to research conducted by Laili (2009) good nurse caring behaviors can form a good satisfaction also for the patient's mother. Professional attitude of nurses such as responsiveness in serving patients and providing nursing care as required by the patient will cause the confidence and trust of patients to nurses isolation. Nurses are maintaining professional attitude when providing nursing care and always keep a good relationship with the patient and family. And always pay attention to the needs of the patient. However, from the results tabulation 1 respondents also found that nurse never gave supportive, corrective and protective of mental, physical, sociocultural and spiritual among other external variables of this factor is physical security, safety and the environment. Internal variables include mental, spiritual and cultural activities. This is consistent with data obtained in the questionnaire a low of nurses in providing health education on infectious diseases in patients and families it is still lacking

According to the results showed that the five respondents (17%) rate the isolation of patients were satisfied and 24 respondents (83%) rate the isolation of patients were very satisfied with the nurse caring behaviors in room G4 G4 Hospital Hospital In Space Prof. Dr. H. Aloei Saboe Gorontalo. The tabulated results in Table 5.2 is based on data obtained from a patient satisfaction questionnaire isolation, the majority of the 29 respondents 16 respondents were very satisfied with the tangible parameters (the fact) that nurses always maintain the neatness and appearance. 9 respondents were satisfied with the nurses maintain cleanliness and readiness of medical devices that are used. 3 respondents are not satisfied with the nurses gave information about the present administration, and one respondent was not satisfied with the nurse maintain cleanliness and completeness of the shower and toilet facilities, seen from demographic data of patients admitted to a treatment duration of 3-7 days. In parameter reliability (reliability) mostly 18 responder patients are very satisfied with the nurse is able to address the issue of patient care insulation appropriately and professionally, 8 respondents are satisfied with the nurse told clearly about the things that must be adhered to in your

treatment, two respondents were not satisfied with the nurses provide information on the facilities available, how to use and order prevailing in the hospital, timeliness nurse arrived in the room when you need. 1 respondents are very dissatisfied with the nurse less informed clearly about things that are forbidden in patient care isolation, seen from demographic data of patients aged 17-25 years old. In parameter responsiveness (quick response) of 15 respondents were very satisfied with the nurse immediately deal with you when he reached the ward isolation, 8 respondents were satisfied with the nurse to help you to the service implementation chest x-ray and laboratory at the hospital, in four respondents are not satisfied with nurse willing to offer assistance to you when having trouble even without being asked, and 2 respondents were very dissatisfied with the nurses provide a special time to help you walk, defecate, urinate, change sleeping position, seen from demographic data education level of patients SD and spare patients from outside Gorontalo. In parameter assurance (certainty) majority of 19 respondents were very satisfied with nurse meticulous and skilled in performing nursing actions to the patient isolation, 9 respondents were satisfied with the nurses always greeting and smile when meeting with patients isolation and one respondent was not satisfied with nurse give less attention to complaints from patients seen isolation from demographic data of patients aged 26-35 and financing sources BPJS. In parameter empathy (affinity) majority of 18 respondents were very satisfied with the nurses often look and examine your circumstances such as measuring blood pressure, temperature, pulse, respiration and intravenous fluids, 9 respondents were satisfied with the nurse informs you about all the maintenance actions that will implemented and 2 respondents were not satisfied with the services provided by nurses do not view their rank or status, but based on your condition, judging from the experience demographic data of patients admitted to the hospital previously been treated with the same disease.

Patient isolation has unique properties that suffer from communicable disease transmission through the sample air and contact with the patient, the patient has a low body resistance, patients in need of assistance in the fulfillment of basic human needs and patient isolation is more sensitive

than other patients. According Muninjaya (2004) in Krishna (2005) factors affecting user satisfaction of healthcare services or the patient is: an understanding of service users about the types of services that will be received, empathy (caring attitude) shown by health officials, the cost (cost), physical appearance or neatness officers, the hygiene conditions of the room and comfort of the room (tangibility), security demonstrated by health workers in providing care (assurance), constraints and skills of health workers in providing care (reliability), the speed of the officer responding to patient complaints (responsiveness). Characteristics of patient satisfaction if the patient is expected to correspond to reality. Attention to the patient's condition was also very influential in patient satisfaction in the nursing care given by nurses. This concurs with research conducted Lestari (2011) which says determinants of patient satisfaction rates for inpatient care from the most important is the reliability, assurance, accessibility, responsiveness, tangible and empathy. In addition the results of research conducted by Wijono 2008 also said the level of patient satisfaction is a function of the difference between the appearance of health services received, and that should be accepted.

Based on the results of the questionnaire 29 patients were very satisfied with the service quality assurance (certainty) in the form of nurses ability to generate confidence and trust in the promise that has been presented to the patient associated with the results of the questionnaire items highest is 18th ie nurses honest in giving information about the state of the patient isolation , according to information provided by a physician or other medical personnel without reducing or adding the actual information that can cause the patient to nurse confidence. Nurses often look and pay attention to the patient such as measuring blood pressure, temperature, pulse, respiration and intravenous fluids, any time shift and when the patient will receive medical treatment and nursing actions. In addition Asmuji (2013) states that the guarantee (assurance) that is to say, knowledge, attitude and ability of the hospital staff to foster the confidence of patients in the form of nurses educated and able to serve patients, maintain patient confidentiality, and increase patient confidence and helps in the healing process of patients.

CONCLUSION-

Conduct nurse caring behavior in G4 (isolation) ward of Prof. Dr. H. Aloei Saboe Hospital Gorontalo mostly always behave caring nurse, this is because nurses are always build a trusting relationship with the patient. Patient satisfaction in G4 (isolation) ward Prof. Dr. H. Aloei Saboe Hospital Gorontalo mostly very satisfied because the nurse's ability to generate confidence and trust in the promise that has been presented to the patient. The more often caring behavior given by nurses in G4 (isolation) ward Prof. Dr. H. Aloei Saboe Gorontalo, then more level of patient satisfaction isolation increase.

For the hospital to educate the importance of nursing caring behavior in a structured and continuous, especially about the satisfaction of nursing services and inputs for hospital managers to evaluate the performance of nurse visits of implementation caring behavior. For caregivers as study materials to improve the nurse caring behavior for patients. In addition nurses need to improve non-verbal communication and verbal communication, health education on infectious diseases in patients and families. Nurses also need to provide a special time to help meet basic human needs in patients with insulation such as walking, defecate, urinate, change sleeping position. For further research could be basic research to examine the behavior of caring nurse and patient satisfaction, especially in the isolation room, so it can add insight in improving the knowledge gained in an institution.

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APPLICATION RELATIONS PROFESSIONAL NURSING CARE MODEL TEAM WITH HOSPITAL PATIENT SATISFACTION IN JOMBANG

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ABSTRACT

Introduction: Professional Nursing Care Model ISASA system (structure, process and value) that enables professional nurses regulate nursing care. But some patients feel less satisfied with the nursing service because the service is not optimal. In Jombang hospitals since the implementation of the model of professional nursing care team early 2002 most of the patients are still expressed dissatisfaction with the services it is evidenced in the number of letters about the suggestion box that is less than optimal care nurse. This study aims to analyze the relationship between the implementation of the Professional Nursing Care Model Team with patient satisfaction in hospitals Jombang. **Method:** This study uses an analytic design with cross sectional approach. Samples were collected using a multi stage random sampling of 240 respondents (120 patients and 120 nurses). These data were collected by using questionnaire and observations and analyzed using correlation test (spearman's rho) with significant level $\alpha \leq 0.05$. **Results:** Analysis showed no relationship between the applications of the Professional Nursing Care Model Team with patient's satisfaction. Nurse unit manager responsibility, the responsibility of the team leader, the responsibility of the team members ($p=0.001$), weigh received ($p=0.001$), centralized drug ($p=0.002$) and nursing documentation ($p=0.001$). **Discussion:** Implementation of responsibility (nurse unit manager, team leader and team members), weigh, centralized medicine and nursing documentation associated very strongly with patient satisfaction. Therefore, it needs to be maintained to the full stand improved implementation of team that still has not gone well.

Key words: *professional nursing care model team, satisfaction*

INTRODUCTION

Improving the quality of hospital services is determined with the application of professional nursing care of them use the model team, this care provides a sense of responsibility of nurses is higher resulting in increased job performance and patient satisfaction (Clifforth & Horvath, 2009). Patient satisfaction is determined either by nursing services. According to Azwar (2006) patients are less satisfied with the nursing care because these services are not optimal.

In hospitals Jombang since the implementation of the model of nursing care professional team early 2002 most of the patients ie 90 (60%) of the 150 patients still expressed dissatisfaction with the services it is proven many letters in the suggestion box on nursing services to sub-optimal (Documentation Hospital Jombang 2010-

2014). The state of BOR impact on the decline, this can be seen from the results BOR patients who experience fluctuations in the last months of 2014. However, in this case is not yet known in detail where discrepancies service to satisfaction of these patients, especially in the application of professional nursing care team models.

The application of the model of professional nursing care team, when the responsibility or the role of nurses both in terms of (documentation, weigh received, and centralization of the drug) is not executed properly, which means showing the performance of the nurses also decreased (Nursalam, 2007). The decline in the performance of the nurses can lead a low nursing care services and patients are not satisfied. If the patient is not satisfied, the

number of patients (BOR), also decreased, which means decreased revenue RS, and if this continues to be an impact on the development of the hospital, which ultimately also about nurses in nursing care and also reward accepted nurses, so that the nurses be lazy to work. When nursing care is low, it can lead to dissatisfaction of patients and continues to do so repeatedly, continuously (Susilowati, 2008).

Satisfaction or dissatisfaction is a judgment. The level of service satisfaction from the patient or the patient's perception of kin. Patient satisfaction will be achieved when they obtained optimal results for each patient and health care attention to patients and families, there is attention to complaints, physical environments and responsive to the needs of patients in order to achieve balance as well as possible between the level of satisfaction and pain and toil which must be experienced in order to obtain these results. In satisfaction of a service in the hospital it is influenced because of lack of communication, empathy, fees, tangibility, assurance, reability, and responsiveness. A good relationship between the patient and the nurse to do when applying a model of good nursing care. By applying a good model then becomes the perfect patient care so that patients can be fulfilled satisfaction. (A.A. Gde Muninjaya, 2004).

To overcome the above so that the necessary structuring of professional nursing care models ranging from workforce or patients and the establishment of the system (Nursalam, 2004). As well as the necessary positive steps to improve the quality of health services, one of which nursing care for nursing care is a service of the most prolonged contact with the patient. Nursing services here include physical treatment (physical needs), psychological treatment (fulfillment psychology), social care (the fulfillment of social needs), and spiritual care (spiritual fulfillment) in accordance with the concept of holistic nursing. With the provision of nursing services integrated (physical, psychological, social, spiritual and educational) and carried out in accordance with the standards expected of patient satisfaction will increase so their interest to use the services will also rise. (A.A. Gde Muninjaya, 2004). As with any model of nursing care in hospitals Jombang which team model in which to implement this needs to be a coordination of all aspects: the nurse's

responsibility regarding the supervision team, nursing documentation, centralized drug, weigh received and nursing rounds. With the development of science nursing, especially in terms of the management, the researchers in this case seek the metaphor of the application of models of professional nursing care team and patient's satisfaction, whether this model is highly correlated with satisfaction patients in hospitals , especially in the application of Jombang.

METHODS

This research is observational analytic . The design in this study using cross sectional design . The population in this study were all hospitalized patients and all patient wards of hospitals Jombang . The sampling for the patient sample using multistage random sampling. With a sample size of 120 respondents and a sample of 120 nurses. Independent variables in this study is Team and the dependent variable is patient satisfaction. the level of patient satisfaction Spearman 's correlation test with significance level $p \leq 0,05$.

RESULTS

Spearman Rho test results on shows that the responsibility of head room in the application of the Model Nursing Care Professionals Team in Jombang Regional Hospital has been executed so well (75%). Responsibility team leader in the application of the Model Nursing Care Professionals Team at Hospital Jombang has done well (83.3 %). Responsibilities of team members in the application of the Model Nursing Care Professionals Team at Hospital Jombang manage well (81.8 %). Patients treated in hospitals, especially in the pavilion Asoka Jombang, Dahlia, Jasmine, Cempaka, Flamboyan, Rose, Kemuning, Waluya effort mostly expressed satisfaction on every execution of nursing that have been carried out , with a Total of 95 patients (79.2 %), and the lowest 4.1 % with the number 5 patients .

There are correlation between the responsibility of the head of the room, the team leader and team members with patient satisfaction. From the test results Spearman rank correlation (ρ) with significance level $\alpha < 0.05$ obtained significance value (p) 0.001 , which means that the correlation between the responsibilities of the head of the room , the

team leader and team members with patient satisfaction is significant and the correlation of coefficient value 0.134 indicates that the direction of a positive correlation with the strength is very low.

DISCUSSION

The responsibility of nurses in hospitals Jombang especially dipaviliun Asoka, Dahlia, Jasmine, Cempaka, Flamboyan, Rose, Kemuning, efforts Waluya Hospital Jombang demonstrate responsibility well run (55 % - 100 %). From the above facts according to Douglas, 2004 stated that the nursing care that have been planned will lead to motivation and sense of responsibility of nurses is so high that will make the quality of nursing care increased, which would make the patient feel to get satisfaction. The nurse's responsibility should be run with the maximum and thorough, so the need for motivation of the employer so that the implementation of the nurse's responsibility goes well. In carrying out daily activities - day Jombang nurses in hospitals are already running well his responsibility. The better the nurse's responsibility higher the nursing care given, especially in the implementation of the Professional Nursing Care Model Team. Viewed from this study that patients treated in hospitals Jombang especially dipaviliun Asoka, Dahlia, Jasmine, Cempaka, Flamboyan, Rose, Kemuning, efforts Waluya Hospital Jombang mostly satisfied (75.2%). According Muninjaya (2004) that patient satisfaction will be achieved when the obtained optimal results for each patient and health care attention to patients and families, there is attention to complaints, physical environments and responsive to the needs of patients in order to achieve balance as well as possible between the level of satisfaction and pain and toil that must be experienced in order to obtain these results. In satisfaction of a service in the hospital it is influenced because of lack of communication, empathy, fees, tangibility, assurance, realibility, and responsiveness. So when they reached the patient satisfaction will also increase hospital revenue.

The responsibility of the head of the room, the team leader and team members have a very strong relationship with patient satisfaction. The satisfaction felt by the patient of the responsibility of the head of the room in terms of planning, organizing, directing and

monitoring. The better the responsibilities of the head of the room, the team leader and team members the higher the perceived patient satisfaction. According to Kron & Gray (2007) that the role of the head of the room, the team leader and team members in the application of models of professional nursing care team is very important and great, so that through a high sense of responsibility to make the quality of nursing care increases and would result in increased patient satisfaction. The responsibility of the head of the room has a very strong relationship with patient satisfaction. This shows that the responsibility of the head of the room in Jombang hospitals run and affect patient satisfaction is high. Good quality nursing care if all the tasks that can be run properly delegated responsibility of head room in the hospital Jombang well done in terms of planning, organizing, directing, and monitoring. Planning here is to regulate and control the nursing care, organizing here in terms of controlling nursing personnel, guidance in terms of increasing kolaborasi between the teams, while for supervision in terms of supervision to every member of the maintenance work in the room. The better the responsibilities of head room (planning, organizing, directing, and monitoring) is executed, then the higher patient satisfaction.

The responsibility of team leader has a very strong relationship with patient satisfaction. This means that the responsibility of team leader in Jombang hospitals run well, which would certainly have an impact on patient satisfaction is also high. Good quality nursing care if all the tasks that can be run properly delegated responsibility team leader in the planning, evaluation, determine the condition of the patient, assess the level of patients' needs, develop the capacity of members and organizes conferences. The better the responsibility of team leader is executed, then the higher patient satisfaction.

The responsibility of the team members has a very strong relationship with patient satisfaction. It has a sense of responsibility of team members in hospitals Jombang run well, thus affecting the higher patient satisfaction. Good quality nursing care if all tasks are delegated to run properly. Responsibilities of team members here in terms of providing nursing care, collaboration with other team members, and provide a report. The better the responsibilities of team

members executed, then the higher patient satisfaction.

CONCLUSION

Implementation of Professional Nursing Care Model Team in Jombang hospitals largely the responsibility of nurses is good. Most of the satisfaction of patients treated in hospitals Jombang very high. Implementation Model Nursing Professionals Team (the nurse's responsibility) has a very strong relationship to client satisfaction.

Inpatient more space can maximize the role of a nurse primarily the responsibility of the head of the room, the responsibility of team leader, and responsibilities of team members to the patient. In each nursing action, nurses always pay attention to every complaint or the patient's response. Nurses should be more sensitive to the patient's condition.

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ROLE OF NURSE IN THE PROVISION OF HEALTH EDUCATION WITH SELF CARE MODEL APPROACH TOWARD READINESS OF PATIENTS TO INCREASE IN SELF CARE AND STRESS LEVEL IN STROKE PATIENTS

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ABSTRACT

Introduction: Stroke is a disease that attacks anyone with very sudden incident and is one cause of death and major neurological disability in Indonesia. Paralysis is the most common disability experienced by patients with stroke, characterized by paralysis on one side of the body (hemiparesis) and paralysis may also occur in various parts of the body, from the face, hands, feet, tongue and throat. Some stress conditions will influence the attitudes and behavior of stroke patients to improve self-care, this study aims to determine the effect of health education on the readiness of self-care and also on the level of stress in stroke patients. **Method :** This study used pre experiment one group pre-post tests. The experiment was conducted in January 2015 through May 2015 in the pavilion 7 Rumkital dr. Ramelan Surabaya. The population used was that stroke patients treated since the month of October to November 2015 by 23 votes with sample random sampling. The independent variable of this research is the role of nurses in the delivery of health education. and the dependent variable is the level of stress. Measuring instrument used to measure the level of stress is DASS. Data were analyzed by Wilcoxon signed rank test with significance level $\alpha < 0,05$. **Results :** Results showed that health education has a significant effect on the nurse's role in the provision of health education to improve the readiness of self-care on stroke patient and also has a significant effect on the level of stress stroke patient. **Discussion:** The implications of this study was there is effects of the nurse's role in the provision of health education to improve the readiness of self-care in stroke patient, so that nurse on neurological room can apply and develop about health education intensively. This research is also expected to provide an alternative to enter the associated stress reduction that patients with stroke may be susceptible to stressors associated disturbance fulfillment of their activities so as to affect the readiness of care themselves independently

Keywords: stroke, the role of nurses, health education, readiness of self-care , stress

INTRODUCTION

Stroke is a disease that strikes anyone with very sudden occurrence and is one cause of death and major neurological disability in Indonesia (Tarwoto, Wartonah & Suryati, 2007: 85). Paralysis is a defect most commonly experienced by patients with stroke, characterized by paralysis on one side of the body (hemiparesis) and may also occur paralysis in various parts of the body, from the face, hands, feet, tongue and throat (Lingga, 2013: 71). Physical changes experienced by patients with stroke is a stressor for patients and families. Stroke patients are no longer able to do any physical

activity, all the activities and needs help from others dependent and requires the attention of someone who cared for him (Lingga, 2013: 72). Family knowledge and stroke patients will influence the attitudes and behavior of stroke patients to improve self-care, lack of knowledge about the disease will result in penderit stroke stroke can not perform activities independently and can be complications of the disease. Observations investigators about education in stroke patients in the nerve Lounge Rumkital dr. Ramelan Surabaya was implemented at the beginning of the patients in the hospital and at the moment there are other complaints that

arise during the patient hospitalized. Education program is not maximized due to several factors such as lack of nurses in the care of stroke patients and the degree of dependence of stroke patients Average - Average total care. Research on the role of nurses in health education with readiness pemberiaan stroke patients to improve self-care and stress level has never been done before.

Based on data from the International Classification of Disease taken from the National Vital Statistics Reports United States for the year 2011 showed an average death from stroke was 41.4% of the 100,000 patients .. According to data from Health Research Association in 2013, the prevalence of stroke in Indonesia 12.1 per 1,000 residents, which is dominated by the age group above 75 years (43.1 per 1,000 penduduk), aged 65-74 years (33.2 per 1,000 inhabitants), aged 55-64 (24 per 1,000 population), ages 45- 54 years (10.4 per 1,000 inhabitants), aged 35-44 (2.5 per 1,000 penduduk), 25-34 years (0.6 per 1,000 inhabitants), and ages 15-24 years (0.2 per 1,000 population). That figure is up compared Riskesdas 2007 of 8.3 percent. Researchers conducted a preliminary study on June 10, 2015 in Space Nerves Rumkital dr. Ramelan Surabaya, obtained data on the number of stroke patients during the month of January 2015 until May 2015 as many as 243 patients with stroke infarction details of 203 patients while 40 patients experienced bleeding stroke and 100% have received education about the disease at the beginning of the stroke in the hospital. Observations were carried out on 10 patients with stroke, obtained four (40%) of 10 patients with recurrent stroke among other diseases complicated by contractures, decubitus and convulsions. 3 patients (30%) of 10 patients obtained with total care because of restrictions on the activity, whereas 3 patients (30%) the other at the level of partial treatment care. Preliminary studies conducted by researchers obtained seven (70%) of 10 patients had a deficit of self-care and stress due to ignorance and anxiety families and patients on how to self-care in stroke patients. Stroke patients who experience self-care deficit by 2 people (20%) because there is no accompanying families. Patients and families are able to perform the treatment in stroke patients only

one person (10%).

The state of stroke patients are very diverse, can be recovered perfectly, recovered with mild disabilities, cured with disabilities may experience moderate or even severe disabilities, especially in stroke patients over the age of 45 years (Junaidi, 2011: 55). The initial attack stroke generally be a disturbance of consciousness, unconsciousness, headaches, difficulty concentrating, disorientation or in other forms. Disturbance of consciousness can appear in other forms such as the feeling of wanting to sleep, hard to remember, blurred vision. In the next few hours disturbance of consciousness will continue the decline in muscle strength and coordination, stroke patients will have difficulty to arrange the words or unable to perform their daily work such as standing, walking, or taking / holding cups, spoons and forks, what held will fall. Other disorders such as inability to control urination and large, lost the ability to feel, have difficulty swallowing and breathing (Junaidi, 2011: 24).

Stroke patients will be people who depend on those around him, including the family and significant others, then many patients who can not independently or minimize the help of others. Restrictions on activities during the acute phase, is the cause of the patient becomes dependent on others to do the activity day living. Patients and families in the acute phase will experience stress because of physical changes that occur because of a stroke. Stress is experienced by the patient or the family if not promptly treated led to focus attention only on weakness and paralysis that occurs when this period of self care needs also support the healing of patients. Stroke patients after passing through the acute phase patients should increase physical activity, modifying the diet and orderly in consuming drugs - drugs in order to support the recovery process. Stroke patients who are not able to improve self-care it is possible to run a deficit of self-care and disease complications (Goldszmidt and Caplan, 2013: 84).

Independence that flows out of stroke patients is critical in accelerating the recovery process defect in the suffering, not only ease the burden on surrounding areas but also can cultivate the spirit for stroke patients (Lingga, 2013: 133). According to Blais, et al (2007: 213) primary teaching role of the

nurse is to teach the patient and family. Teaching such as home include health education, how to perform self-care, taking medication instructions, including side effects and how to do the recommended treatment. Most of the health education provided to patients directly, but a family member or caregiver can also be taught about patient care. Patients with stroke have to be satisfied basic needs, such as nutrition, personal hygiene, and activity, so there is no change in the basic needs. Only patients with stroke need the help of others in doing the activity day living (Lingga, 2013: 93). Family involvement in patient care is also expected to reduce the stress that is felt This also needs to be considered in preparing the independence of patients in self-care. Nurses forced to be more proactive in providing health education on self-care to patients and families. In accordance with the role of nurses as educators that aim to improve the level of knowledge of health resulting in a change of behavior from clients (Hidayat, 2007: 31).

Health education is one of the nursing plan of action which must be incorporated in the planning of discharge (discharge planning). Discharge planning is the first step to start the treatment and preparation of long-term care. Based on the background of the above researchers want to know the influence of the role of nurses in the provision of health education with self-care approach to the model of the patient's readiness in improving self-care and stress levels in stroke patients

METHOD

In this study, using experimental design methods research design approach pretest - post test design. The population in this study were all patients with stroke in Space Nerves Rumkital dr. Ramelan Surabaya number of 24 patients in the span of a month in January 2015 to May 2015, using a sample of Probability sampling technique as much as 23 respondents. Variables in the study is the provision of health education through discharge planning activities as independent variables and the dependent variable in the study was the readiness of patients in self-care as measured using Denyes Self Care Activity Instrument (DSCAI) and stress levels were measured

using the instrument DASS. The hypothesis is there are significant research with patient readiness Health education in self-care and health education there is the influence of the stress.

RESULT

Collecting data was held on 15 November 2015 until December 10, 2015, and obtained 23 respondents were given perlakuanya the provision of health education. In the results section described the value of preparedness improving self-care and stress levels before being given health education, having given health education and the influence of the nurse's role in providing health education to improve the readiness of self-care and stress levels in stroke patients in Rumkital dr. Ramelan Surabaya

Table 1. Effect Role of Nurses in Providing Health Education to improve the readiness of self-care in patients with stroke in RumkitalDr Nerve Lounge. Ramelan Surabaya

	N	Mea n ± s.d	Mean diffren t ± s.d	Mean diffren t IK 95%	
Readines s before HE	2 3	55.1 3 ± 13.6 9	7.78 ± 12.124	2.54 – 13.03	0.00 5
Readines s after HE	2 3	62.9 1 ± 8.57			

Based on data obtained readiness increase self-care both before and after health education in Stroke Patients of the 23 patients experienced a readiness largely increased as many as 20 patients (87%) and did not increase as much as 3 patients (13%).

Based on the above table obtained value - average in readiness improved maintenance yourself before giving health education in Stroke Patients at room RumkitalDr nerves. Ramelan Surabaya at 55.13 with a standard deviation of 13.686 and on Improved Readiness Self-Care after being given health education with an average value of 62.91 with a standard deviation of 8.570 so the average value increase of 7.783. Based on the test of normality get prior probability values are given health education amounted to 0.514 > α (0.05) and after health education is

given with probability equal to $0.117 > \alpha (0.05)$, it can be said that the data were normally distributed. The following are the descriptive data for calculating results Improved Readiness Self-Care in Patients with Stroke in Nerve Lounge Rumkital Dr. Ramelan Surabaya. On the results of the data analysis described normality test and paired t-test.

Based on the test paired t-test in getting the probability value (ρ) before and after administration of health education sebesar $0,005 < \rho (0.05)$ it can be concluded that their Influence Role of Nurses in Providing Health Education Readiness To Improve Care of Yourself In Stroke Patients in Space nerves Rumkital dr. Ramelan Surabaya.

Based on research result the data obtained stress levels in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya before being given the Health Education by respondents as many as 23 rang known with normal stress as much as 21.7%, 21.7 mild stress, moderate stress and severe stress 39.1 17.4%.

Table 2. The effect of Nurse Roles in Providing Health Education on the level of stress in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya

PREHE * POSTHE Crosstabulation		POSTHE			
		normal	Moderate	Severe	Total
PREHE	normal	5	0	0	5
	Light	5	0	0	5
	Moderate	7	1	1	9
	Severe	3	1	0	4
Total	20	2	1	23	

Characteristics of stress levels in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya after health education given by respondents as many as 23 people obtained amounted to 87.0 normal, mild stress 0%, 8.7% moderate stress and severe

stress 4.3%. Statistical test results obtained with the Wilcoxon test p equal to 0.020. Based on this it can be concluded that there is the influence of the role of nurses in the provision of health education on the stress scale in stroke patients

DISCUSSION

According to result obtained readiness in providing self care both before and after Stroke Patients given education in health of 23 patients experienced a readiness largely increased as many as 20 patients (87%) and did not increase as much as 3 patients (13%). Based on the value - average in readiness improvement of self-care before being given health education on stroke patients in Space RumkitalDr nerves. Ramelan Surabaya at 55.13 with a standard deviation of 13.686 and the readiness of an increase in self-care after a given health education with an average value of 62.91 so the average value increase of 7.78.

Based on the test paired t test sign on the values obtained before and after health education of $0.005 < \alpha (0.05)$ it can be concluded that the Influence Role of Nurses in Providing Health Education Readiness To Improve Care of Yourself In Stroke Patients in Neurology Lounge Rumkital dr. Ramelan Surabaya.

Gender male before being given health education average value of 64.75 and all male respondents have rated above average, having given health education nilai the average is 64.50 and all male respondents experienced an increase in value but there are two respondents whose value is below the average. In the female respondents are given health education before the average value of 50, which is below the average of 10 respondents and which is above the average of five respondents. Education nilai health Sesudah pemberian average increased to 62.07 and respondents who score above average as many as 10 respondents while 5 respondents still have a value below the average even though the increases in value. Behavioral differences by gender This could be possible due to hormonal factors, physical structure and division of labor norms. Women often behave based on feelings, while men tend to behave or act on rational considerations (Notoatmojo, 2014: 14). In Woman have more feeling smoother and more conscientious about something. But women tend to experience

more severe stroke because women tend to experience stress and depression. This condition will worsen health conditions (Lingga, 2013: 22). In women with menopause because estrogen increases the risk of stroke initially act as protective experienced penurunan. Itu also become more answers pertanyaan stroke experienced by older women than men old.

At the age of 50-55 years before giving education the average value of 57.80. After being given health education average value rose to 60.80. 2 respondents have a value below the average and 3 respondents have rated above average. Respondents age 56-60 years before the administration of health education has a value below the average and after the administration of health education 1 respondents have rated below average and 1 respondent above average. Age 61-65 years average value prior to the administration of health education adalah 53.18, 5 respondents have rated below average and 6 respondents have rated above average. After administering the health education only two respondents who have a value below the average, while 9 respondents have rated above average. Respondents 66-70 years of age prior to the administration of health education terdapat 1 respondents who have an average value below and 4 above the average, after being given a health education terdapat 2 respondents below the average and 3 above average.

Two-thirds of stroke survivors are those aged 65 years. The aging process of cells as age and illness experienced by people tuamemperbesar risk of stroke in old age. Entering the age of 50 years, the risk of stroke becomes double every 10 years of age increased (Lingga, 2013: 21). Usia also affect the behavior in people with stroke, behavioral health of a person or society is determined by the intentions of the health of the object, the presence or absence of support from the community surroundings, whether there is information about the health, the freedom of individuals to make decisions, and situations in which a person behaves or not (Notoatmojo, 2014: 78). The forms of individual behavior change one of them is a willingness to change, occur when there is innovation in society, which often happens is that some people are very quick to accept the change and partly slow to accept change (Notoatmojo, 2014: 89). A person with old age would be difficult to

accept the changes.

Last Education in junior high school respondents have an average value of 47.33 for the prior administration of health education with 6 respondents have a value below the average and 3 respondents than average and the average of health after giving education the average increased to 61.78 with 3 respondents under average and 6 respondents than average. Education High School prior to the administration of health education have an average value of 60.14 while for after the administration of health education have an average value of 63.64. At the high school education in values before and after the health education there are 5 respondents with a value below the average and 10 respondents have above-average grades.

Theory Lowrenc Green, as quoted by Notoatmodjo (2014: 76), analyzing the human attitude of soundness. The health of a person or community is influenced by two main factors, namely the attitude factor and factors beyond attitude. Furthermore, the behavior itself is determined or formed from three factors: predisposing factors, enabling factors, and factors driving. Health behavior change through means of education or health promotion by providing health information. Furthermore, the knowledge that will lead to awareness and ultimately will cause people to behave in accordance with their knowledge (Notoatmojo, 2014: 90). Changes in behavior with education will result in a change yang effective when done via method "discussion participation". Health knowledge as the basis of the behavior of even a reference the behavior of others (Notoatmojo, 2014: 91). Changes in a person's behavior is not only influenced by higher education but is also affected by how much information a person obtained in improving the health and self-care.

Health behavior change, especially on self-care a little different with the existing theory that says the higher one's education is more and more knowledge. Readiness of self-care in stroke patients not only based on the height of one's education but rather lead to the willingness or intention, attention to health, experience and how often a person gets information about health.

Value to each question in the questionnaire DSCAI given after the administration of health education have increased in all the numbers, but the highest

value lies in the number 33 is entered in the point strength of the ego (ego strength). Here it can be seen that the power of the ego is more predominant in patients and families with stroke, it is because some of the things that is knowledgeable about health and self-care in stroke patients has increased, the energy expended in performing self-care is getting lower and attention to health is better than before given health education.

The questionnaire DSCAI in use obtained the highest score before the administration of health education on numbers about 8 and 9 with the average value of 59 which is the point of feeling (feelings), so it can be concluded during this time the patient and family with stroke perform self-care based on feeling without constituted adequate knowledge in decision-making, especially in the readiness of self-care.

Stroke is a condition that arises because of a circulatory disorder of the brain that causes the death of brain tissue resulting in a person suffering from paralysis or death (Batticaca, 2008: 56). Clinical symptom arising from stroke is a sudden neurological deficit, which is preceded by prodromal symptoms occur at rest or waking. Neurological deficits that occur in stroke patients led to voluntary control disappears, resulting in patients with ischemic or hemorrhagic stroke would damage the physical mobility related to neurovascular disorders. Damage to physical mobility is characterized by weakness, paraesthesia, damage coordination, limited range of motion and decreased muscle strength.

Mobility physical damage in stroke patients will experience a decrease in self-care needs that require post-stroke patients become dependent on others, at least for the time until the physical and mental condition improves. Stroke patients with limited physical mobility requires the help of others to do the day living activity can not be done alone (Lingga, 2013: 93). The role of care as educators should be optimized to provide health education to patients and families in order to improve the readiness of improving self-care.

Based on self-care nursing theory raised by Dorothea Orem, people basically have the ability to care for himself the so-called self-care agency (Nursalam, 2013: 58). Self care agency may change at any time influenced by the role of nurses comprised As

educators: Award health education, For nursing care provider, as an advocate, as a coordinator, as a collaborator, as a consultant, as a reformer. When there is a deficit of care, the role of nurses as nursing agency helps to maximize the capabilities of the implementation of the self-care of stroke patients through health education, to improve the ability or independence in the implementation of self-care stroke patients (self care agency) against self-care needs of stroke patients (self care demand), such as the ability to meet the nutrition and fluids, mobilization, personal hygiene, elimination.

The role of nurses in health promotion in the present era is pentung. Dimana nurses seek to increase the responsibility of nurses to personal health and Community. Trend in nurses towards health promotion has created an opportunity for nurses to strengthen the influence of nurses on health promotion, spread information that enhances the public more aware of the health and assist individuals and communities to change health behaviors that last a long time (Kozier, et al, 2010: 173).

The level of stress in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya before being given the Health Education by respondents as many as 23 rang known with normal stress as much as 21.7%, 21.7% mild stress, the stress was 39.1% and 17.4% severe stress. Characteristics of stress levels in patients with stroke in Rumkital Dr. Ramelan Surabaya after health education given by respondents as many as 23 people obtained amounted to 87.0% of normal, mild stress 0%, 8.7% moderate stress and severe stress 4.3%. Statistical test results obtained with the Wilcoxon test p equal to 0.020. Based on this it can be concluded that there is education of the health effects of stress scale stroke patients.

According to Hans Selye (1976) stress is the body's response that is not specific to any claims or expenses. Stress can cause negative feelings contrary to what is desired or threaten the emotional well-being, which in result by the stressor increase. Stressor is generally divided into two: the stressor internal and external stressors. Stress levels appear depending on the pain that is experienced individuals.

Stress is a condition where a person experiences an imbalance between the condition of the body and mind because of many factors. The human body responds to

anxiety and stress is characterized by muscle tension. When stress increases the autonomic nervous system responds by stimulating the adrenal gland to increase the secretion of adrenal hormones and cortisol. Increased adrenaline resulted in increased work of the heart, breathing patterns, blood pressure, and increased metabolism. A good knowledge tends to form a positive attitude towards an object which is a predisposition to do well too. But the process is not always the case because the three are influenced by factors of age, education level, experience, confidence, amenities, availability of resources and socio-cultural (Brehm and Kassin, 2000). The higher the person's knowledge then the behavior will also be getting better, it is in accordance with the theory of Notoatmodjo (2003) states that a good knowledge, will lead to a positive attitude and good behavior anyway. Stress is very situational and influenced by several factors. The existence of an intervention that comes from outside the client is expected to minimize the internal stress. In this condition the adrenal hormone secretion decreases, thus the condition of the body that previously increased work of the heart, breathing patterns, blood pressure and metabolism will decrease with changes in stress ranges.

CONCLUSION

That has been conducted on November 15, 2015 through to December 10, 2015, it can be concluded readiness improve self-care in stroke patients before pemberian health education in Rumkital dr. Surabaya Ramelan average of 55.13 with a standard deviation of 13.69. Readiness improve self-care in stroke patients after the administration of health education in Rumkital dr. Surabaya Ramelan average value of an average of 62.91 with a standard deviation of 8.57. Statistical analysis showed there are significant role of nurses in the provision of health education to improve the readiness of self-care in patients with stroke in Rumkital dr. Ramelan Surabaya.

The level of stress in stroke patients in Rumkital Dr. Ramelan before given HE showed moderate stress, and after being given HE stress levels showed a decline, could thus be concluded that there is education of the health effects of stress scale stroke patients.

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THE EFFECT OF GIVING CRUDE EXTRACT OF PURSLANE TOPICALLY TO ACCELERATE THE 2nd GRADE OF BURN HEALING PROCESS IN GUINEA PIGS

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ABSTRACT

Introduction Burns can be treated either chemically or naturally. Purslane is one of the herbs that are useful for healing wound because it has a lot of advantages like antimycrobacterium, increasing fibroblast cell proliferation and collagen synthesis. Aim this research to explain the effect of giving crude extract of purslane to accelerate the second grade of burn wound healing process in guinea pigs. **Method** This research using a true-experimental design by 20 samples, 3 months old-male guinea pigs, divided into two groups, 1 treatment group and 1 control group. This classification was done randomize. Data obtained from the observation of the signs both of inflammatory and proliferation phase. Mann-Whitney statistical test used to analyze erythema and edema inflammatory phase. While wound fluid, wound granulation, and wound side using non-parametric statistical test namely Kruskal-Wallis. **Result** Result showed that there were differences between crude extract of purslane and control group in erythema ($p=0.028$), wound granulation ($p=0.057$) and wound side ($p=1.000$) at 3rd day, erythema ($p=0.028$), wound granulation ($p=0.028$) and wound side ($p=1.000$) at 5th day, and erythema ($p=1.000$), wound granulation ($p=0.027$) and wound side ($p=0.029$) at 7th day. **Discussion** In conclusion, crude extract of purslane was proven to be more effectiveness in accelerated burn wound grade 2nd healing, increasing fibroblast cell proliferation and reduce any infection risks. For further research, microscopic observation of collagen, PMN-cell (neutrophile), MN-cell (Lymphocyte and monocyte) is needed.

Keyword: purslane, *Portulaca oleracea L.*, burn wound healing

INTRODUCTION

Burn is a form of tissue damage or loss caused by contact with a source that has a very high temperature (eg, fire, hot water, chemicals, electrical and radiation) or very low temperatures (Moenadjat, 2009). Second degree burns, covering damage to the epidermis and dermis in part, in the form of an inflammatory reaction with exudation process. There bullae, pain for the end - the end of the sensory nerve is irritated (Noer, 2006). Second degree burns healing occurs spontaneously generally take between 10-14 days. The healing process of burns can be overcome either by chemical or natural. Topical antibacterial usually given to local burns to prevent infection. The antibacterial is Mafenid acetate (Sulfamylon), Silver sulfadiazine (Silvadene), 0.5% silver nitrate solution, and Nitrofurazon (Furacin, Nirozone). However, its

use has toxic effects both locally and systemically, for example silver sulfadiazine can cause crystals sulfa (crystalluria) and an increase in pain, silver nitrate can cause electrolyte imbalance (hypokalemia), mafenid acetate can cause skin rashes, burning, urticaria, pruritus and swelling (Kee et al, 1996). One study reported that one out of 30 children with burns Grade II who underwent treatment with silver sulfadiazine were infected and 6 of 43 (14%) of adults with second-degree burns II experience side effects systemically by using silver sulfadiazine (Wasiak & Clealand, 2008). In addition to the chemical treatment, there is a natural treatment. One of them using purslane (*Portulaca oleracea L.*) to accelerate the healing process of burns. WHO data in 2005 mentioned, as many as 75-80 percent of the world's population never use herbs. Indonesia express public interest in using herbs, continue

to increase based on the concept back to nature (back to nature). Purslane showed the presence of flavonoids, saponins and tannins that function as anti-inflammatory, antiseptic and antioxidant. Saponins are essential compounds in the treatment of burns. The mechanism is a spur saponin in the healing process of burns (Arrisandi, 2009).

Based on research conducted by Rashid et al. (2003), reported that the crude extract of purslane have any effect in the acceleration of wound healing by reducing the surface area of excision wounds in mice topically. Several studies have reported that purslane contains many components of the active compound. As one alternative in wound healing, need to be tested the effects of extracts of purslane in accelerating the healing process of burns. For the purposes of this study used a guinea pig (*Cavia cobaya*).

RESEARCH METHOD

Design of this research is Post-Test Control Group Design. The inclusion criteria are common characteristics of the study subjects affordable target population to be studied. The researchers defined criteria, namely: age is 3 months, weight 350-450 grams, male, active movement, clean fur, clear eyes and without disabilities

Exclusion criteria namely guinea pigs that died in the study. The sample size in this study was taken in accordance with the inclusion criteria, namely guinea pig (*Cavia cobaya*) a number of 20 heads.

Animals adaptation to the place of study. The next stage, the groups use different cages and given the bulkhead for each guinea pig, then do manufacture burns musculus gluteus medius using a metal with a diameter of ± 2 cm, and then do the treatment of wounds

from day one according to the research plan. Group A was given a crude extract of purslane and group B (control) were given 0.9% normal saline and then each sample by marking numbers one through nine on the thigh samples using a permanent marker. In the sample in a sterile wound care is done once every two days in the morning at 9 and do appraiser burns on the 3rd, 5th and 7th after treatment involving two volunteers assessors. Volunteer assessors already know the healing of burns in both practice and theory. The purpose of the assessment is done by two volunteers is to reduce bias in research and also to eliminate the subjectivity of the researcher at the time of the assessment of the results of the healing of burns.

According to Rashid et al, (2003) the procedure of making crude extract of purslane are:

1. Materials used are fresh purslane washed
2. Purslane wrapped in plastic and stored in a refrigerator overnight.
3. Purslane destroyed until creamy using a blender at high speed for 5 minutes, without the use of any additives.
4. Use immediately on burns.
5. Do the same for the next treatment

To determine the level of difference significance of the process of accelerated healing of burns Grade II in the inflammatory phase between treatment groups the crude extract of purslane and a control group of researchers using statistical test non-parametric Mann-Whitney, as well as the inflammatory phase and proliferation using statistical test non-parametric Kruskal-Wallis with $p < 0.05$ (Desy, 2007)

RESEARCH RESULT

Table 1 Distribution of guinea pig animal weight among treatment groups (crude extract of purslane) and the control group

Sample No.	Weight each treatment group (g)	
	Crude extract of purslane	Control
1	425	400
2	400	450
3	350	425
4	350	450
5	425	450
6	425	425
7	450	425

8	450	450
9	425	450
10	450	350
Mean ± SD	415.00 ± 37.639	427.50±32.167
<i>Kolmogrov-Smirnov Test</i>	p=0.064	

From table 1 above - average weight of experimental animals treated group was 415.00 grams and the average - average weight of animal control group was 427.50 grams. It concluded that there was no significant difference in body weight in both treatment groups.

Observation result of research on the inflammatory phase between the treatment group and the group kontrol. Tanda inflammasi in the wound healing process include redness, edema and fluid in the wound. Here is the data obtained about the signs of inflammation in each treatment group on day 3, 5th and 7th.

Table 2 The result of observation for inflammatory phase redness treatment group and the control group on day 3rd, 5th, and 7th.

Animal	Redness on day					
	3 rd		5 th		7 th	
	A	B	A	B	A	B
1	2	1	3	2	3	3
2	2	2	3	3	3	3
3	2	1	3	2	3	3
4	1	1	2	2	3	3
5	2	1	3	2	3	3
6	1	1	2	2	3	3
7	2	1	3	2	3	3
8	1	2	2	3	3	3
9	2	1	3	2	3	3
10	2	1	3	2	3	3
<i>Mann-Whitney</i>	p=0.028		p=0.028		p=1.000	

Tabel 3 The results of the observation phase of the inflammatory edema treatment group and the control group on day 3rd, 5th, and 7th

animal	Edema on day					
	3 rd		5 th		7 th	
	A	B	A	B	A	B
1	3	3	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	3	3	3	3
7	3	3	3	3	3	3
8	3	3	3	3	3	3
9	3	3	3	3	3	3
10	3	3	3	3	3	3
<i>Mann-Whitney</i>	p=1.000		p=1.000		p=1.000	

Tabel 4 the results of the observation inflammatory phase fluid in the wound treatment group and the control group on day 3rd, 5th, and 7th

Animal	Fluid in the wound on day					
	3 rd		5 th		7 th	
	A	B	A	B	A	B
1	3	3	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	3	3	3	3
7	3	3	3	3	3	3
8	3	3	3	3	3	3
9	3	3	3	3	3	3
10	3	3	3	3	3	3
<i>Mann-Whitney</i>	p=1.000		p=1.000		p=1.000	

DISCUSSION

The reddening of the wound

Based on the results of research conducted in guinea pigs treated group, redness diameter from 0.5 to 2 cm on day 3, and smaller <0.5 cm on the 5th day. While in the control group of guinea pigs, redness diameter > 2 cm on the 3rd day, redness diameter from 0.5 to 2 cm on the 5th day. This shows that the administration of crude extract of purslane can speed decrease redness. As for the redness day 7, all treatment and control groups had not showed redness. This happens because on the 7th day of the inflammatory phase has ended.

Rubor or redness is the first thing seen in the area of inflammation. Along with the start of an inflammatory reaction, arterioles supplying the area to dilate allowing more blood to flow into the local microcirculation. Capillary - Capillary previously empty, or may be only partially stretch, quickly fills with blood. This condition is called hyperemia or congestion, causing local inflammation redness. Body control the production of hyperemia in the early inflammatory reactions, both neurologically and chemically through the release of substances - such as histamine (Price & Wilson, 2005)

The crude extract of purslane are able to accelerate the loss of red because it has ability as anti-inflammatory and antibacterial. Crude extract of purslane ability to control inflammation for their saponins and flavonoids. According to Inamdar (Fauziah, 2010), triterpenoid glycoside capable of inhibiting activation of phospholipase A2 so would inhibit the synthesis of arachidonic acid,

which result in a decrease inflammation. According Trease and Evan (Taufik, 2008) the effects of flavonoids on a wide range of organisms are very diverse therapeutic effect caused by the flavonoids, among others, hypo-allergenic, anti-inflammatory, anti-inhibitor of tumor growth, these effects are caused due to the influence of the effects of flavonoids on the metabolism of arachidonic acid. Flavonoids shorten the free radical reactions that can increase vascularization.

Second degree burns treatment using crude extract was able to reduce the distance redness at the wound edge is marked by increasingly narrowing diameter redness on day 5 and disappeared on the 7th day. The results showed that the diameter of the redness of the wound edges in the crude extract of purslane group is smaller than the treatment group using normal saline 0.9%. This is due to inflammatory material in the crude extract of purslane are flavonoids, tannins and saponins are able to make optimal regulation of inflammatory running so effective in reducing the redness.

Edema

Results of treatment of second degree burns on purslane crude extract group and the control group were conducted, showed that in both groups did not obtain the edema on day 3, 5th and 7th.

The crude extract of purslane is capable of eliminating the edema on day 3 due to saponins capable of inhibiting the synthesis of leukotrienes that prostaglandin and serves as a mediator of inflammation (Harin, 2007). Flavonoid content is also able to regulate

inflammation by either pressing local swelling so that the blood supply to the wound is not disturbed (Fauziah, 2010).

Edema is one of the cardinal signs (cardinal symptom) of the inflammatory phase. Based on the data, either the treatment of wounds using crude extracts of purslane or 0.9% normal saline are able to accelerate the loss of edema in second degree burns 3rd day. The use of crude extract can eliminate the edema because it contains anti-inflammatory and antibacterial that can regulate inflammation and therefore contributes to the acceleration of the healing of burns Grade II in the inflammatory phase. In the control group was also not obtained edema, it can be caused by the wound care provided in accordance with the principle of the right wound care, wound sterility maintained so that the wound is not contaminated with bacteria. In addition, because the body's defenses guinea pig well supported with good nutrition anyway so edema in the wound did not happen.

The fluid in the wound

Based on the results of research conducted, the results of the second-degree burn treatment by using a crude extract of purslane

The ability of crude extract in preventing fluid purslane pus in the wound because the crude extract of purslane contains a substance that acts as an antibacterial and antioxidant. The crude extract of purslane contains vitamin B and C in addition to the tannins are antioxidants. According to Frei (Fauziah, 2010), vitamin B and C known to be effective as an antioxidant that inhibits the formation of Reactive Oxygen Species (ROS) and free radicals that can damage cells if the amount is excessive. Reactive Oxygen Species merupakan a substance produced by neutrophils in the inflammatory process as a result of the bacterial antigen stimulation.

The use of crude extract of purslane and 0.9% normal saline group in preventing the presence of fluid in the pus in the wound showed no difference between the two groups, namely the absence of pus in the wound fluid, although both groups discount different components.

Identification of a decrease in the proliferative phase II degree burns

According Torre (2006) The proliferation phase starts on day 2 to 3 after the wound that is characterized by the appearance of fibroblast cells and by Gruendemann & Fernsebner (2005) ended on day 22 (Fauziah, 2010).

Level of granulation

On the 3rd day guinea pig with dengan treatment of wounds using crude extracts of purslane are partially wound granulation visible injuries ranging mering.Pada control group has not seen the wound dries. On the 5th day of crude extract of purslane group guinea pig occur granulation in part by the emerging presence of scab. This proves that the crude extract of purslane can increase the proliferative phase of healing granulation degree burns II.

The mechanism is a spur saponin in the healing process of burns (Arrisandi, 2009). Saponins are glycosides triterpena (triterpenoid glycoside) and sterols that have been detected in more than 90 tribes plants. Saponins will improve the synthesis of TGF- β , which stimulates the formation of collagen biosynthesis.

Purslane crude extract in the treatment of second degree burns able to accelerate the granulation in wounds, in contrast to the control group (normal saline 0.9%). This is because the crude extract of purslane have compounds that can stimulate fibroblast cells, angiogenesis is a very important role in wound healing.

The wound margins

It appears that at day 3 and 5 have not been fused wound edges on each - each group of crude extract of purslane and control. On the 7th day epithelialization (the wound edges) fused partially on a crude extract of purslane group contained four guinea pigs, while the control group there were 1 guinea pig. It shows the acceleration of healing of burns Grade II in the group crude extract of purslane.

The ability of crude extract of purslane accelerate the unification of the wound edges due to some component substances are saponins and vitamin C. Saponin (triterpenoid glycoside) is the most important components in the crude extract of purslane that play a role in accelerating wound healing that is by increasing the content hidropsipolin and mucopolysaccharides, improving collagen

synthesis, angiogenesis, epithelialization and synthesis of extracellular matrix (Fauziah, 2010). Vitamin C in skin wounds will increase hydroxyproline formed which is one constituent of collagen. more kandunganhydroxyproline the amount of collagen that is formed will be. Fibrose collagen is a protein that serves to give strength to the wound so as to accelerate the process of wound pengatupan ends (Syihabuddin, 2005).

Provision of crude extract of purslane able to accelerate the shrinking size of the wound when compared to the control group. This is because the crude extract of purslane are components - components that are capable of increasing the synthesis of collagen, epithelialization, angiogenesis and thus the proliferative phase goes well. This is a proof that the crude extract of purslane influential in the healing process II degree burns.

CONCLUSION AND RECOMENDATION

Conclusion

The crude extract of purslane proved too fast for a time of healing characterized by redness diameter reduction, granulation and unification of the wound edges with better results in the second degree burns.

Recomendation

Necessary to study the healing process of burns Grade II observation microscopically, to be seen various changes in collagen cells, cells PMN (neutrophil) and cell MN (lymphocytes, monocytes) in both phases of inflammatory and proliferative so the results are more accurate.

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EFFICACY OF OCCUPATIONAL THERAPY INCREASING DAILY ACTIVITIES TOWARD PATIENT WITH NEUROLOGICAL DISORDERS

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ABSTRACT

Introduction : Eighty percent of dominant disease found in developing countries in non-communicable diseases and chronic diseases. People with chronic diseases include arthritis, heart, lung, neurological disorders, limitation of motion from self-care through their daily activities in the community. Evidence based on occupational therapy for Parkinson's disease and other neurological disorders is still lacking. The scientific evidence on the effectiveness of specific intervention methods should guide occupational therapy interventions for this patient. Currently, the problem of disability to perform activities of daily living (ADL) that occur in patient with neurological disorders can be solved through a comprehensive intervention in rehabilitation medic. It becomes an important issue that needs to be known by the public and health workers that occupational therapy is one part of rehabilitation medic is capable of improving the independence of people with neurological disorders.**Method:** Source article used obtained from a search through Google Scholar, Ebscho, and ProQuest began in 2000 to 2015. In process of sorting, there are 34 articles which suit the topic Then the articles sorted more by inclusion criteria definite by the reviewer. The inclusion criteria: occupational therapy is performed in patients with neurological disorders that affect the improvement of ADL.**Result:** This review resulted that effectiveness of occupational therapy show increasing in quality of performance of ADL in patients with neurological disorders.**Conclusion:** Occupational therapy has an effect in patients with neurological disorders in terms of increasing functional performance and involvement of ADL.

Keywords: *occupational therapy, neurological disorders, activities of daily living*

INTRODUCTION

Gardjito (2004) defines treatment in medical science at this point is no longer limited to the ailment, but also health and other conditions due to disease, for example, the disability may be impairment (abnormality on the structure and function of the anatomy, physiology or psychological), disability (incapacity to do simple activities) and handicap (setback happened to someone so will limit himself to play normally). The inability to do simple activities and setbacks that occurred in someone so will limit himself to a role normally can be trained with occupational therapy.

The World Health Organization and the World Federation of Neurology who

collaborate with the International Survey of Country Resources for Neurological Disorders (2006) involving 109 countries and covers more than 90% of the world population indicate that neurological disorders about 6.22% in 2005 and is expected to increase to 6.39% in 2015 and 6.77% in 2030. The number of sufferers of the disorder of the nervous system in Indonesia with prevalence each stroke is reached 500,000 inhabitants each year and about 2.5% of people die, then follow with a head injury 2.18%, dementia 7.58%, epilepsy 0.5%–4%, Parkinson's 0.6–3.5%, multiple sclerosis 5% and migraine about 11% (Risksedas, 2013).

Stroke and other neurological disorder will experience a imobilitation i.e. the inability

to move actively due to various illness or impairment (disorders of the body's organs) physical or mental (Ginsberg, 2008). Occupational therapy is a therapy based on the client that uses the activity or job purpose and meaning to people of different ages in the entire spectrum of physical and mental health to assist in the remediation of difficulties experienced by post-war illness and disability. (Govender & Karla, 2007).

The more active a person doing a job, can improve the structure of the social, economic, and community, so that she became more comfortable in the midst of his community and will facilitate adaptation to the environment. In occupational therapy, a heavy emphasis on attention to the introduction of the ability is still there, then raise or raise it so that it is able to resolve the issues at hand. Its main purpose is to shape someone to be more independent, without having to rely on the help of others (Widodo, 2004).

METHOD

The method in use in the literature review begins with the selection of the topic, then the specified keyword to search the journal using the language of English and Indonesian Language through multiple databases include Google Scholar, Ebscho, and Pro Quest. This search is limited to his journal from January 2000 until November 2015. The keyword is "occupational therapy", "neurological disorders ", "activities of daily living". Select a journal to do the review on the basis of studies according to the criteria of inclusion. Criteria for inclusion in this review of the literature is the use of occupational therapy against patients with neurological disorders. Search using keyword above found 34 journal. Of the entire journal obtained the appropriate inclusion criteria based on PICO (P: patients with neurological disorders; I: occupational therapy; O: the improvement of ADL) is four articles. All four articles are then observed and performed with Critical Appraisal.

RESULT

This literature review using 4 articles research results. Two studies used randomized controlled trial methods and two others used descriptive study methods. The articles are the result of research from Netherlands, United States and United Kingdom.

The first article is randomized controlled trial. This research used control and treatment groups . The population in this study is the patients with Parkinson's disease in 10 hospitals in the Netherlands totally 191 patients on April 2012. Selection of the samples in this study were randomized ie after the baseline phase (initial assessment related categories inclusions), patients were randomly assigned to be classed as a group using Computer-generated minimization algorithm that controls the random allocation of patients. Intervention was occupational therapy for 10 weeks based on the national practice guidelines, then evaluated for 3 months related to the increase in activities of daily living. This study used some instruments, including work capacity measured by index COPM, participation in activities measured by a scale of Utrecht, the effects of fatigue measured by severity scale, mood (as measured by the Beck Depression Inventory), health-related quality of life (measured by questionnaire Euro Qol) and overall quality of life (as measured by the Visual Analog Scale). The hypothesis of this study was these interventions improved the perceived performance of patients with Parkinson's disease on daily activities compared with usual care. The instruments were valid and reliable so that the results were accountable (Sturkenboom, 2014).

The second research article about the use of occupational therapy on brain cancer patients with craniotomy. This research is a descriptive study. This study used data retrospectively, Of the 65 patients with craniotomy were hospitalized oncologist who received occupational therapy in the period March-May 2005. The observations were made two months after the completion of occupational therapy has been administered to the patient. Sixty five patients who received occupational therapy intervention, of the 54% received mobilization exercises, ADL training reached 50%, and coordination exercises / ROM reached 28%. Of the 65 patients, 34% received occupational therapy specific cognitive, 45% are given health education and family support, and 52% received the sustainability of occupational therapy or rehabilitation in community service. The results of this study showed that occupational therapy has contributed in patients with post craniotomy, which can increase attention, awareness of personal safety, and improving

function in everyday activities. It can also help the patient in terms of regulating the activities of daily routine, improve concentration, and problem solving in simulated everyday (Claudine, et al, 2009).

The third article is a descriptive study research using data cross-sectional, descriptive study of older people with multiple sclerosis (MS). Samples of this study is people with MS living in Minnesota, Wisconsin, Illinois, Indiana, and Michigan. A total of 1282 people with MS aged 45-90 years who had been diagnosed with MS about 20 years. Nearly 74% of respondents in this study were women and more than half (53%) reside in urban areas. About three-quarters of participants reported that they live in a house and more than 88% indicates that the accessibility of their housing arrangements as good or excellent. About two-thirds of respondents in the study reported their health as good or excellent, but the average (median), they experienced two MS related symptoms. Most respondents reported some degree of symptoms of the disorder, the symptoms most often reported that problems with the balance (90.1%), fatigue (88.3%), and weakness (85.5%). The results of the studies suggest that occupational therapy is important to improve their ADL's ability to maintain the health and well-being. They were very satisfied with the service (Finlayson, et al, 2008).

The type of research that is used on the fourth article is randomize controlled trial with single blind. This article describes about the use of occupational therapy in stroke patients has been done in the hospital discharge planning or return back home. This study was divided into 2 groups: the intervention group and the control group. Interventions at this research that occupational therapy is given for 6 months after being treated in hospital, while the control group only performed follow-up without occupational therapy. Respondents in this study were hospitalized stroke patients who will return home from the hospital amounted to 138 patients. Of the 138 patients have been classified into 2 groups, 71 patients as the control group and 67 patients as the intervention group. Of the two groups showed that as many as 44 patients in the intervention group and 43 patients in the control group patients reported feeling satisfied and comfortable related services performed at home. The results of this study showed that an

increase in ADL functioning and satisfaction of stroke patients who have done occupational therapy after inpatient returned home (Gilbertson, et al, 2000).

IMPLICATIONS FOR NURSING PRACTICE

Literature review has implications for nursing practice, especially the medical-surgical nursing. Based on research data by Sturkenboom, et al., (2014) the intervention is given in the form of occupational therapy. As is well known, occupational therapy is applied medical targeted for physical and mental patients by using the media activity as therapy, in order to restore the function of a person to obtain a sense of independence as possible. Intervention is given have significant results, it is seen from the results between the two groups (intervention and control group), there are differences in outcomes among the intervention group experienced significant changes related to the increase in performing everyday activities become better and their positive impact and satisfaction in the intervention group.

Research on occupational therapy ever held in Indonesia by Ardhiyani (2013) in the installation's Gatot Subroto Army Hospital Medical Rehabilitation. Some 77% of stroke patients have been back on their feet after being given occupational therapy. It can support the enforceability of occupational therapy is to be held in Indonesia. The results of this review will add to our knowledge that occupational therapy will improve the perceived performance of patients with neurological disorders such as stroke, Parkinson's, and brain cancer in daily activities compared with usual care. From the results of this review are also known to cause occupational therapy for greater participation in daily activities by the patient and caregiver burden is lower, leading to improved quality of life for patients and caregivers or nurse in hospital case.

CONCLUSION

After conducting a review on the four journals, the conclusion that can be delivered include:

1. Inability to perform simple activities and setbacks that occur in a person will confine himself to play normally, it is often experienced by patients with

nervous system disorders such as stroke, Parkinson's, multiple sclerosis and brain cancer.

2. Occupational therapy is a therapeutic effort that involves the use of therapeutic activity and applied to patients with physical or mental disorder with the aim to increase the independence, prevent new disability, and improving health.
3. Occupational therapy will improve the performance, patients with Parkinson's disease more likely to feel the effectiveness of occupational therapy while performing daily activities compared with usual care.
4. Occupational therapy in patients post craniotomy has effect in improving cognitive functions such as attention, problem solving, and an improvement in daily activities.
5. Occupational therapy has an impact on stroke patients in terms of improving activities of daily living (ADL).

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THE ROLES OF NURSES AND EDUCATIONAL KNOWLEDGE IN CHEMOTHERAPY ADMINISTRATION: A LITERATURE REVIEW

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ABSTRACT

Introduction : Nurses have major responsibility for improve patient safety and their own practices by implementing error prevention techniques during chemotherapy administration. Nurses play a major role in ensuring that appropriate practices are in place to meet the safety standards of medication and management of chemotherapy in their institutions. Therefore, competency in chemotherapy administration is a crucial component for implementing best practice for nurses to ensure patient safety and provide high-quality care and also prevent themselves from hazards of cytotoxic drugs. The aims of this study was to review and describe published empirical studies that focused on The Roles of Nurses And Educational Knowledge In Chemotherapy Administration. **Method** : The following databases were used to identify and locate the literature available safety standards of chemotherapy administration and nurses' behaviors : MEDLINE database, CINAHL, Proquest and the British Nursing Index. The key words used to search the literature included nurses' behaviors, nurses' role and knowledge of nurses and chemotherapy administration and safety standards. **Result** : A total of 5 studies were included in the review. The studies were conducted in the UK (n = 1), Taiwan (n=1), Japan (n=1), France (n=1) and Switzerland (n=1). Most were qualitative and quantitative studies utilizing crossing sectional study design cross sectional questionnaire and prospective studies. Samples ranged from 11 nurses to multiple sites. The majority of studies were undertaken in chemotherapy ward or oncology, hematology, teaching hospital settings with others taking place in long-term care facilities. **Conclusion** : The results of the literature review on the research we have done on 5 journals on the role of nurses and educational knowledge in chemotherapy administration and safety standards in clinical practice.

Keyword : *Role of Nurses, Educational, Knowledge, Chemotherapy*

INTRODUCTION

Nurses have major responsibility for improve patient safety and their own practices by implementing error prevention techniques during chemotherapy administration. Nurses play a major role in ensuring that appropriate practices are in place to meet the safety standards of medication and management of chemotherapy in their institutions. Therefore, competency in chemotherapy administration is a crucial component for implementing best practice for nurses to ensure patient safety and provide high-quality care and also prevent themselves from hazards of cytotoxic drugs. A solid knowledge of chemotherapy is necessary to assist new nursing graduates to work as competent beginner practitioners within healthcare settings, including reducing risks for handling of cytotoxic drugs and providing safer patient care by minimizing hazards. Senior nurses with more experience working

on oncology wards seemed more knowledgeable than other nurses. (Yu, et al., 2013)

According to the World Health Organization, each year, more than 11 million patients worldwide receive a new diagnosis of cancer. This number is expected to rise to 16 million by 2020 (Connor & McDiarmid, 2006; World Health Organization, 2006). Chemotherapy is still the main treatment regimen, and approximately 50% of patients with cancer receive chemotherapy (Ben-Ami, Shaham, Rabin, Melzer, & Ribak, 2001). Currently, approximately 100 different anti-cancer drugs are in use (National Institute for Occupational Safety and Health [NIOSH], 2004) and many more are under development.

The characteristics of cancer drugs have given rise to many issues. One issue is whether nurses are competent to administer such drugs. Nurses need sufficient knowledge of

chemotherapy protocols and the toxic effects of these drugs if they are to provide safe, high-quality care to patients with cancer without endangering themselves (Del Gaudio & Menonna-Quinn, 1998). A balance is needed between self-protection and the need to administer these high-alert cancer drugs (Connor & McDiarmid, 2006). Therefore, guidelines and standard operating procedures have been established for nurses when working with chemotherapy drugs.

Rioufol et al (2014) reported that despite several guidelines and safety recommendations for anticancer drug handling, including the use of protective equipment and the preparation of injectable anticancer drugs by a dedicated pharmaceutical unit, significant trace amounts of these agents were found on nurses' gloves, with potential genotoxic risk. The intravenous-line purge preceding antineoplastic infusion-bag administration is a potential source of exposure in nurses.

Yu et al (2013) examined senior nurses with more experience working on oncology wards seemed more knowledgeable than other nurses. During the current nursing shortage and with high turnover of nursing professionals, it may be difficult to access sufficient experienced staff. Instead, the recommendation is to provide more teaching and training about chemotherapy both in formal educational programs for nursing students and as part of on-the-job training for newly graduated nurses. It is important to ensure that high-alert chemotherapy drugs are handled by trained personnel, especially nurses, in an era in which they are likely to care for increasing numbers of patients with cancer.

It is clear then that chemotherapy administration is seen as an important aspect of healthcare across the world and that educational knowledge has been identified as having a vital role to play in preventing and controlling. This review of the literature was carried out in order to inform a study into the behavior of nurses in the practice settings and educational knowledge of safety standards precautions affecting compliance with guidelines of chemotherapy administration. The aims of this study was to review and describe published empirical studies that focused on The Roles of Nurses And Educational Knowledge In Chemotherapy Administration

METHOD

The following databases were used to identify and locate the literature available safety standards of chemotherapy administration and nurses' behaviors : MEDLINE database, CINAHL, Proquest and the British Nursing Index. The key words used to search the literature included nurses' behaviors, nurses' role and knowledge of nurses and chemotherapy administration and safety standards.

RESULT

A total of 5 studies were included in the review. The studies were conducted in the UK (n = 1), Taiwan (n=1), Japan (n=1), France (n=1) and Switzerland (n=1). Most were qualitative and quantitative studies utilizing crossing sectional study design cross sectional questionnaire and prospective studies. Samples ranged from 11 nurses to multiple sites. The majority of studies were undertaken in chemotherapy ward or oncology, hematology, teaching hospital settings with others taking place in long-term care facilities.

Nurses have major responsibility for improve patient safety and their own practices by implementing error prevention techniques during chemotherapy administration. Nurses play a major role in ensuring that appropriate practices are in place to meet the safety standards of medication and management of chemotherapy in their institutions. Therefore, competency in chemotherapy administration is a crucial component for implementing best practice for nurses to ensure patient safety and provide high-quality care and also prevent themselves from hazards of cytotoxic drugs. A solid knowledge of chemotherapy is necessary to assist new nursing graduates to work as competent beginner practitioners within healthcare settings, including reducing risks for handling of cytotoxic drugs and providing safer patient care by minimizing hazards. Senior nurses with more experience working on oncology wards seemed more knowledgeable than other nurses. (Yu, et al., 2013).

In this study, one large teaching hospital was used as the target hospital. Therefore, the possibility of a biased sample should be considered before the results are interpreted. Of the questions used to evaluate nurses' knowledge of chemotherapy, 12 of 20 reached

discriminatory power of greater than 0.33, indicating that the questions were good to excellent. Factor analysis was conducted to examine construct validity and determine whether the four domains of the questionnaire were appropriate. The results showed that seven factors were determined when the eigenvalue was set at greater than 1 with varimax rotation. The findings showed that seven factors could explain 59.18% of the total variances. Examination of these factors, however, showed that factors 6 and 7 each comprised only one item, factor 2 comprised two items, and three factors (6, 7, and 2) could be categorized into two domains (safe handling of chemotherapeutic agents and characteristics of cancer drugs) of the original questionnaire. After it was concluded that both theory-based and statistical results were necessary to determine the domains of the questionnaire, the original four domains that were developed and used in this study were retained. Further research to validate and modify the questions is suggested to provide a better tool to evaluate nurses' knowledge of chemotherapy.

By the Rioufol et al., (2014), workplace contamination was still recently reported in oncology wards including both day-care and inpatient units. Correlation between the amount of drugs handled and the extent of surface contamination remains controversial, highlighting the necessity of systematic safety procedures. This concern has been urged by recent studies in which novel abnormalities, such as early DNA damage, were detected in health care workers handling anti neoplastic drugs. Moreover, the use of personal protective equipment (i.e., gloves and masks) decreased, but did not prevent, primary DNA damage. These findings were expected given the well-known permeability of gloves to cytotoxic agents. Even though anti-cancer drugs were prepared by the pharmaceutical team, contamination was detected in oncology wards, particularly in administration areas. Nurses seem to be less at risk for aerosol inhalation than through other means of exposure, such as direct skin contact with contaminated intravenous tubing, or patients' excreta with hand-to-mouth contact.

Despite the availability of safety guidelines for more than twenty years (OSHA, 1986), use of protective equipment is limited. Recent studies found that 25-40% of (4) respondents used improper gloves for chemotherapy

handling and up to 69% of nurses failed to wear gowns (Martin & Larson, 2003; Polovich & Martin, 2010). Finding in these studies revealed that some nurses do not incorporate safety precautions into their practice because of not fully understood. Knowledge about nurses' decision to use safety precautions is necessary to provide guidance in designing interventions to increase their use and reduce hazardous exposures.

Likewise, Turk et al. (2010) carried out the analytic cross-sectional study to evaluate the level of knowledge of nurses on the health effects and the routes of exposure to CDs, to clarify the protective measures while handling these agents and to determine the influence of this knowledge on clinical attitudes, behavior and actual usage of safety measures at Nicosia. It was found that although notwithstanding the rules and regulations pertaining to CDs, nurses did not comply with them. It was found that service training was a very effective tool to increase the level of knowledge. This study also revealed the necessity for improvement of the working environment and the availability of appropriate protective equipment.

Most of research findings it revealed that a large amount of the reasons on why compliance with the recommended practices was inadequate in most workplaces due to the lack of up to date guidelines, poor staff knowledge on these guidelines and institutional policies, differences in work settings and preparation activities and the unavailability of the protective equipment. The actual administration of these agents required skilled techniques and a thorough understanding of the tasks involved in specific administration procedures. Thus, the ONS and the Association of Pediatric Oncology Nurses recommend that only registered nurses (RN) who have received both didactic theoretical training and supervise clinical experience to administer cancer chemotherapy.

Yu, et al., (2013) examined that nurses' knowledge about chemotherapy seldom comes from formal nursing school education. The curriculum from one nursing school was examined and showed that nurses received only 3 hours of education on chemotherapy. This is obviously not enough to prepare nursing students fully to handle chemotherapy. In this study, nearly 80% of registered nurses (78.8%) had undergone training in the safe handling of cancer drugs. The high rate of

training may reflect the specific characteristics of the hospital surveyed. In this study, the survey was conducted at one of the largest teaching hospitals in the capital city of Taiwan (Taipei). In large teaching hospitals, nurses receive more continuing education on chemotherapy, but the results (60.9% correct answer rate) indicated that nurses still have insufficient knowledge of chemotherapy. This may be because nurses are given insufficient information and time for training; the results showed that most nurses (65.0%) had received only 1 to 4 hours of training in the previous year. This is not enough time to cover all of the necessary knowledge related to chemotherapy. Nurses also hope to obtain more training in this area; in this study, 77.3% of participating nurses hoped to gain more training in chemotherapy. Therefore, both formal nursing education and in-hospital continuing education are recommended to provide nurses with more training on the characteristics of cancer drugs and the safe administration of chemotherapy.

CONCLUSION

The results of the literature review on the research we have done on 5 journals on the role of nurses and educational knowledge in chemotherapy administration and safety standards in clinical practice. The role of nurses did not provide good role models and nurses' chemotherapy administration behaviors which are considered inappropriate or harmful. Although chemotherapy knowledge among nurses is fairly good, incorrect practices which include failure to wash hands and to use gloves and PPE, unsafe handling and disposal of cytotoxic drugs, and unsafe cleaning procedures and a wide range of improvements is needed. The educational program used in this study helped enhance the nursing nurses' knowledge of and attitudes toward safety standards and increased nurse adherence to safety guidelines and ultimately have a significant effect on reducing hazards.

The review suggests that there is the role of nurses in infection prevention and control and an evidence of the efficacy of educational knowledge in improving practice and reducing rates of errors. There is also minimal literature available about the role of nurses, though there is more evidence relating to educational knowledge in chemotherapy.

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THE RELATIONSHIP OF WORK STRESS WITH NURSE PERFORMANCE IN CRITICAL ROOMS (EMERGENCY UNIT, OPERATING THEATER AND RECOVERY ROOM) CARUBAN HOSPITAL MADIUN

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ABSTRACT

Introduction: Nurses working in critical rooms (Emergency Unit, Operating Theater and Recovery Room) challenged every day to provide a more complex nursing not only with emergency patient conditions and strict observation all the time but also manage sophisticated technology, interacts with family and other care givers. The challenges and workload of nurses in critical room owned, nurses have the potential to experience job stress that would have an impact on the performance of nurses. The purpose of this study was to determine the relationship between stress and performance of nurses in the critical rooms Caruban Hospital Madiun. **Method:** The study design used is a design researcher correlational study with cross sectional approach. The study population was all nurses in the critical rooms Caruban Hospital Madiun some 43 people. While the samples obtained by 35 people. The instruments used in data collection was a questionnaire and job stress questionnaire nurse performance. The analysis technique used is Spearman's Rho with SPSS 19.0. **Result:** The results showed that the stress of nurses in the critical rooms Caruban Hospital Madiun, almost all of which 31 (88.6 %) of respondents have job stress research with lightweight category. Performance of nurses in the critical rooms Caruban Hospital Madiun, most of which 19 (54.3 %) of respondents have a good performance by category. No statistically significant relationship between work stress with the performance of nurses in Caruban Hospital Madiun 2015 (significant values (p) of 0.002 (0.002 < 0.05)). Closeness of the relationship between work stress with the performance of nurses in Caruban Hospital Madiun 2015 was classified as moderate (correlation value of 0.502). **Conclusion:** It is expected that the nurses can prepare themselves to be able to adapt in the face of work and be able to do some things to alleviate distress in the works.

Keywords : *work stress, nurse performance, and critical room*

INTRODUCTION

Nurses as a nursing care giver are the spearhead in the hospital, because nurses give nursing care in 24 hours. This big responsibility have not supported yet by enough human resources, so that the nurse's performance become an attention by other professional, patient and patient's family. One of factor that influence nurse's performance is the capability to face work stress in their work place (Gibson, 2000). The nurses working in the critical rooms (Emergency Unit, Operating theater and recovery room) are challenged to give more complex caring every day, not only for patient's condition but also for high technology medical equipment, and interacting with the patient's family and other professional (Gruendeman, 2006). Based on National

Safety Council (2004), nurse's work caused higher stress than other profession.

Based on one of researcher on June in the critical rooms Caruban Hospital shown that nursing implementation which were done, such as nutrition needs, elimination needs, and personal hygiene, it were only done partially. Some nurses were angry when giving nursing care for patient and their family, forgetting for giving medication, patient and family didn't fill the *informed consent*, and high incident of patient's unsatisfaction. The result of review for nurses, they said that if high number of patient wasn't follow by enough infrastructure cause the nurse's work load more and more heavy. In addition, nurses are also required to be a cashier and administration, patient transporter inpatient room and ambulance

nurse. And even sterilization of medical equipment, and other equipment. The rising of number of patient visits is not balanced with the human resources or the number of nurses.

From the data of number of patient's visits from Emergency Unit and outpatient obtained an increasing of 20% to 40% from April to June. According to Hudak and Gallo (1997) that the work stress affect the productivity and decreasing of nurse's performance. An increasing number of patients, of course, it will increase the nurse's workload. Increasing workload will impact the work stress experienced by nurses, occupational stress is high and not controlled properly will cause negative impacts, one of which labor productivity will decrease.

According to the survey PPNI in 2006, approximately 50.9% of nurses working in four provinces had job stress, dizziness, could not rest because the workload is too high and time-consuming, as well as low wages without adequate incentives but accompanied most circumstances stress affects nurses are working life. Based on previous research, nursing conditions especially in giving nursing care to patients has not been going well. Statistical results in the United States showed that 40% of workers feel their work stressful and 25% of employees consider job is the most stressful things in life (Seminar PPNI, 2006).

The Causes of stress for nurses in the critical space that is physical danger (X-rays, needle, laser, and the use of substances that are harmful to health), the patient is unconscious, crying, screaming, sound monitors humming, respirators, stress others and should not be underestimated is everywhere there is a human body that is damaged or discolored, expenditure feces and urine, the atmosphere of the room and lighting (Hudak and Gallo, 1997). Work stress is manifested in the form of verbal, physical, psychological, and behavior all of which will lead to poor performance, absence and sickness (National Safety Council, 2004).

Nurses are under pressure repeatedly, they can not provide the full service of nursing care according to the patient's needs (Hudak and Gallo, 1997). Work stress experienced by many employees and health leaders who will influence the motivation and performance, especially nurses (National Safety Council, 2004). Critical rooms has a very high stressors, and if the nurses who work in this room do not

have the coping mechanisms of stress that is good, it will affect the performance of nurses. According to Gibson (1997) (in Nursalam, 2015) there are three factors that affect the performance of that individual factors, psychological factors, and organizational factors. Group variable on variable terdiri psychological perception, attitude, personality, learning and motivation. Work stress was included in the psychological factor.

The decline in the performance of nurses greatly affect the image of hospital services in the community. Poor nursing services engenders a lack of public trust in the ability of the hospital. Besides, the low performance of nurses is also a barrier to the development of professional nursing towards nurses. According Marrinier (1991), the nurse can prevent and control stress by determining personal goals and objectives of jobs. Nurses need to know the sources of stress in order to be able to develop stress management and efforts to improve the performance right, so established good relationships with peers, management and other health team. To the authors are interested in doing research on the relationship of work stress with the performance of nurses in critical rooms Caruban Hospital Madiun with the hope to be input for nurses to maintain and improve the quality of work to the satisfaction of patients and families use the health services in Caruban Hospital Madiun.

METHOD

The study design used by researchers is correlational study design (relationship or association) that research aimed at revealing the relationship between variables correlative with the approach used is cross sectional in critical rooms (Emergency Unit, Operating Theater and Recovery Room) Caruban Hospital Madiun and a research was conducted in 1st September to 4th December, 2015.

The population of this study were all nurses working in critical room Caruban Hospital Madiun by 43 people. In this study, the sample used is a nurse working in critical rooms Caruban Hospital Madiun are 35 people.

This study provides a description of the percentage of job stress and nurses performance. Comparison of the value of the ordinal - ordinal scale using Spearman Rho test

analysis using SPSS 19.0 for windows with significance $\alpha = 0.05$.

RESULT

The results of the demographic that is most of which 23 (65.7%) of respondents of this study male sex. most of which 18 (51.4%) of respondents aged between 31-40 years. most of which 23 (65.7%) of respondents had a recent education Nursing Academy. nearly half, 15 (42.9%) of respondents occupy critical room in eergency unit. Work stress is distress experienced by nurses in the face of a job, or something that is seen as a threat, either real, or imagination, where the perception comes from a feeling of fear or anger. Almost entirely, 31 people (88.6%) of respondents work stress research have the lightweight category.

According to researchers, the low job stress owned nurse in the critical room Caruban Hospital Madiun because nurses do routine work that is likely to be similar each day, the nurse on duty had a workload that is sufficient in dealing with patients, working conditions conducive and co-workers to work together well able to suppress the work stress experienced by nurses. In addition, work experience possessed nurses were able to reduce job stress resulting from work she lived for many nurses who have advanced in their work. By age shows that employees Caruban Hospital Madiun has a maturity of age and classified adulthood, it also causes job stress of employees in critical room Caruban Hospital Madiun is low. Low stress of nurses in critical room Caruban Hospital Madiun cannot be separated from environmental factors and working conditions are conducive. Low conflict between the nurse and the high solidarity and brotherhood that exist in the critical room Caruban Hospital Madiun was able to reduce work stress and raises comfort in the work. High labor solidarity in critical room Caruban Hospital Madiun has been shown of the nurses work activities, such as the good cooperation, co-workers want to replace another colleague who was unable to carry out the work and assist each other in completing the work as a nurse. Work stress with the lightweight category experienced nurses in critical room Caruban Hospital Madiun were able to have a good performance by category, as many as 19 people (61.3%). The results of this study are

consistent with the opinion of Hafizurrachman (2009) stated that there are three factors that affect performance are: 1) the personal ability to perform such work, 2) the level of effort that is poured out, and 3) support organizations. These three factors are closely related to each other, when one of the factors did not exist then performance can decrease. Siagian (2009) argued that the higher one's education, the greater the desire to utilize the knowledge and skills they have. Performance has a causal relationship of competence, while competence is made up of the knowledge, skills, behaviors, and experience to do a job or role effectively. While knowledge of the individual not only come from experience, but the level of education a woman (Wirawan, 2009). The performance of nurses is the behavior of work performed by nurses in performing nursing care or nursing in accordance with the performance standards, which include: conducting studies, determining nursing diagnoses, develop an action plan, implementation and evaluation plan. Most of which 19 (54.3%) of respondents have a good performance by category. The results are consistent with the theory presented Abraham and Shanley, (in Sunaryo, 2004), five sources of stress of nurses in general is the workload overload, difficulty relating to other staff, difficulty caring for critically ill patients, dealing with the treatment and care of patients as well as failure treating patients. This theory is in accordance with the existing conditions in the critical room Caruban Hospital Madiun, where excessive work load is uncommon in a typical day except on certain days for their catastrophic incidents or traffic accidents.

According to the researchers, indicate that nurses working in critical room Caruban Hospital Madiun have been working optimally and wholeheartedly dedicated itself to serve Caruban Hospital Madiun. Performance is quite good nurse is happening in the critical room Caruban Hospital Madiun is inseparable from the role of all parties; complement each other so that the vision and mission of the hospital can be achieved. In addition, work commitments owned by the nurses also improve the performance becomes better. In addition, nurses in critical room Caruban Hospital Madiun have competence in his work, so the choice of his current job is a choice of conscience in accordance with its skills. Good performance results cannot be separated from

the environment in which the organizations that support the management Caruban Hospital Madiun, besides oriented in patients also taking care of its employees as well as the welfare of old and new employees without discrimination.

Based on Spearman Rho test with $\alpha = 0.05$ (5%) between work stress and nurse's performance in the critical room Caruban Hospital Madiun of 0.002 (ρ significant value <0.05), because the value is smaller of 0.05; then based decision-making criteria H_0 . This means that there are statistically significant relationship between work stress and nurse's performance in the critical room Caruban Hospital Madiun in 2015.

Based on the analysis of the level of the relationship between job stress and nurse's performance in the critical room Caruban Hospital Madiun in 2015 showed a correlation value of 0.502; because of the closeness of the values ranged from 0.400 to 0.599; it means that the relationship between job stress and nurse's performance in the critical room Caruban Hospital Madiun in 2015 was classified as moderate. The negative sign on the correlation value indicates that the relationship between the two variables is negative; it means if work stress experienced by nurses increased the nurse's performance will decrease, and vice versa if work stress experienced by nurses decreased the performance of nurses will rise. The results of this study support the idea of Sederm (Azazah, 2009), in which one of the factors that affect a person's performance or productivity of a person is a stressful job, so the lower the person's performance depends on how the severity of stress experienced. Job stress could cause accidents or other health problems that can eventually lead to decreased productivity and also can lower a person's performance. The results of this study are also in accordance with the opinion of Handoko (2001), the stress experienced by caregivers can help (functional) in improving work performance, but can also be the opposite, that inhibit or damage (infungsional) performance. It depends on how much the level of stress experienced nurses. If there is no stress, challenges none work so that performance tends to be low, because there is no effort to face the challenges. In line with the increasing stress, work performance of nurses tends to rise because of stress helps nurses to exert all

the capabilities to meet various requirements or needs some work. When the stress has reached the optimum point that is reflected in the ability of the implementation of the daily work of nurses, increasing or increasing stress is less likely to result in improved performance. Finally, when the stress becomes too great, work performance began to decline, due to the stress interfere with the implementation of the work.

According to the researchers, low job stress conditions to nurses in critical room Caruban Hospital Madiun is more influenced by the working environment and working conditions that run with the condition. In addition, the cooperation between nurses and between parts as well as ongoing communication with both able to minimize errors in the work and minimize conflict among employees. Their low job stress in nurses in critical room Caruban Hospital Madiun impact on the performance of nurses. Nurses in critical room Caruban Hospital Madiun as a whole already has competence in their respective fields, so that the work which they are responsible can be resolved properly. In addition, work experience and maturity of age also played a role in improving the performance of nurses to better again. Experience as a nurse and is supported by the skills of reliable be its own capital for nurses to complete the task and responsibility as a nurse in the critical room Caruban Hospital Madiun.

CONCLUSION

Statistically significant relationship between work stress with the performance of nurses in hospitals Caruban hospital Madiun. The closeness of the relationship between work stress with the performance of nurses in Caruban hospital Madiun was classified as moderate.

The hospital must always pay attention to the workload of nurses and able to anticipate problems related to the performance of nurses, by receiving input from subordinates as well as from families of patients who directly feel the performance of nurses. The hospitals Caruban Hospital Madiun should build a nice working environment, by being open and communicating with employees and creating a harmonious communication between employees in hospitals Caruban Hospital Madiun.

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CORRELATION BETWEEN IN THE USE OF TB-DOTS AND PULMONARY TUBERCULOSIS PATIENT'S LEVEL OF TREATMENT ADHERENCE

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ABSTRACT

Introduction : Pulmonary tuberculosis is one of the diseases causing death in Indonesia. Pulmonary tuberculosis takes at least 6 months continuous treatment without interruption, so it is important to the patient to have commitment and level of medication adherence. The aim of this study was to analyze the correlation between in the use of TB-DOTS and Tuberculosis patient's level of treatment adherence. **Method** This study used a correlational design. The population was all Tuberculosis patients who was seeking treatment at Lung Polyclinic of RSUI Madinah Kasembon. Samples were selected using purposive sampling techniques, with DOTS implementation as an independent variable, and the level of adherence as the dependent variable. Data were collected using a questionnaire, the results of data normality were tested by *Kolmogorov-Smirnov* and finished by using *Pearson's Correlation* with $\alpha \leq 0.05$. **The results** showed that implementation of DOTS was not related to the patient's level of medication adherence. This was indicated by correlation coefficient of $r = 0.259$. It showed that there was a correlation between in the use of TB-DOTS and the level of adherence, but it was not significant enough, as showed by significant value of $p = 0.299$. **Discussion** There are many factors that affect a person's level of adherence with Tuberculosis to take medicine outside the implementation of DOTS. Another aspect such as internal or external factors of adherence could affect level of adherence. Future studies are expected to study other factors that may improve adherence to TB patient.

Keywords: TB-DOTS, adherence, Pulmonary Tuberculosis

INTRODUCTION

TB is a chronic infection occurs in the lungs, caused by *Mycobacterium tuberculosis* infection that developed tubercle in the lungs. Tubercle is a nodule or swelling of lymphocytes and epithelioid cells which then form some lesions in patients with TB. TB treatment takes at least six months and have side effects, less favorable in patients making patients do not complete treatment. The most common of resistance incidence is the resistant of TB germ to isoniazid and rifampicin (LeMone & Burke, 2008).

Tuberculosis is an infectious disease that remains a health problem in society, and it is one of the causes of death for Indonesian people (ministry of health, 2009). Based on the report of WHO in 2013, the TB incidence rate in Indonesia (700.000 cases) ranks third behind India and China, and also it also has a mortality rate as many as 27/100 population (Suharyo, 2013). Whereas in 2012, the global

incidence rates has reached 122 per 100,000 population and the incidence of reduction figure around 1-2% every year. Even though incidence rates has decreased, but Indonesia can not be considered be free from tuberculosis. TB is no longer a health problem in Indonesia if there is reduction of the incidence of TB by 90% or to 10 / 100,000 population and the decrease mortality caused by TB at 95% from 2015 (Indonesian ministry of health, 2014). TB is also called as remerging disease when the decreasing incidence numbers rise again. In Madinah RSUI Kasembon registered 12 TB sufferers. From the patients confirmed positive TB, there are some whom are recommended by the doctor to have the treatment the nearest health center of their home. However, there are also a number of patients who want to continue the treatment at RSUI Medina Kasembon. The risk of developing tuberculosis is increased due to several reasons, such as the characteristics of

individual, contaminated air with TB germs, and the length of exposure to TB bacteria. In addition, poor ventilation at home as a result of slums living environments, population density, and the number of people living in the same house may increase the concentration of droplet so that transmission to others becomes easier (LeMone & Burke, 2008).

Adherence by Lutfey and Wishner (1999) is a behavior or procedure to obey the advice of a doctor on the use medications, which are preceded by a process of communication between patients with medical service providers. Adherence has an important role in healing patients with TB, because the treatment is done every day for 6 months requires a high commitment, so that later the patient otherwise recovered of TB. However, due to several factors, such as perception of people about the severity of the disease, the interaction between the patient and the doctor or nurse, policies and practices of treatment made by the authorities, or interventions to motivate patients to adhere to treatment regimens, the compliance of each individual can give a difference (Horne, 2006).

The high rate of medication discontinuation leads to high cases of germ resistance against OAT which need greater costs, and increased duration of treatment (Aditama,2001). Therefore it requires an appropriate strategy to improve medication adherence in patients with TB. Tuberculosis control strategy launched by the Indonesian government poured in three main strategic pillars. They are integration of TB care centered on patients and TB prevention efforts, policies and support systems which courageous and obviously, as well as the the intensification of of research and innovation (Ministry of Health, 2014).

This is synergistic with WHO's program featured the DOTS (Directly Observed Treatment Shortcourse) that has been implemented from the 1990s and this is effective in controlling TB. Yet most hospitals and private medical practices still do not implement Directly Observed Treatment Shortcourse (DOTS) strategies and International Standards for Tuberculosis Care (ISTC) as this program has a high commitment, not just from governments, but also from health care providers.

Due in the implementation, health care providers should be able to attract people

infected by TB, monitor their treatment, providing the Supervisory Swallowing Medicine (PMO), and monitoring the condition of the patient until the end of the treatment period (National Guidelines for Medical Care of Republic of Indonesia, 2013).

RSUI Medina Kasembon has implemented TB DOTS program in April 2014. However, there are no data that describes the effectiveness of DOTS program in the successful treatment of TB patients with.

This is what makes the writer would like to examine the effectiveness of programs that have been implemented by RSUI Medina Kasembon in the success of the treatment TB patients. in accordance with the theory of Goal Attainment, proclaimed by Imogene King that the interaction between the nurse and the client will lead to action. In this case the DOTS program conducted by the Hospital and executed by a nurse will bring the action, the motivation of the patient to carry out the treatment to completion, giving rise to reaction of the patient, ie compliance in the treatment of tuberculosis (Alligood, 2014).

The Purpose of this study is analyzing the correlation between the use of TB DOTS and adherence level of TB treatment at RSUI Madinah Kasembon.

METHOD

The research design is correlation research with cross sectional approach. The population was 24 of TB patient who seek TB treatment at RSUI Madinah Kasembon. The writer used *nonprobability sampling: purposive sampling* technique. The sample of the research was 1) smear-positive pulmonary TB patient without comorbidities, 2) The TB patient has a treatment for a month, 3) The TB patient is willing to be respondent and he or she has signed the approval research letter, 4) The TB patient has a medication treatment at pulmonology centre RSUI Madinah Kasembon 5) The patients were more than 17 years old 6) The patient live together with family in a house.

Independen variable research was implementation TB-DOTs program. Dependen variable was adherence level of pulmonary TB patient. The measurement of DOT implementation used a questionnaire filled by respondent. Whereas to measure the patient adherence in consuming the TB medicine used

modified Morisky Scale. Meanwhile, to measure the adherence level of TB patient who has therapeutic medication was put on a questionnaire.

Whereas the data analysis on DOTS implementation and compliance of TB patients were tested by using statistical computer program Pearson Correlation parametric test with significance level $\alpha < 0.05$.

Result and Discussion

1. The appliance of TB - DOTS program at pulmonary centre RSUI Madinah

Tabel 1. The appliance of DOTS for TB patient at RSUI Madinah Kasembon, 2016

The appliance of DOTS	Frequency	Percentage (%)
Applied	10	56
Not applied	8	44
Total	18	100

Tabel 1 shows that 56 % of TB Patient apply DOTS program

2. The adherence of TB patient in consuming the medicine Penderita TB at RSUI madinah

Tabel 2 The adherence of TB patient in consuming the medicine at pulmonary centre RSUI Madinah Kasembon, 2016

The adherence of consuming the medicine	Frequence	Percentage (%)
adherence	12	67
Not adherence	6	33
Total	18	100

Tabel 2 shows that 67% pf TB patient adhere on the consuming anti TB medicine

3. The correlation between the appliance of DOTS program and the adherence of consuming the medicine at pulmonary centre RSUI Madinah Kasembon

Tabel 3 the correlation between the appliance of DOTS program and the adherence of consuming the medicine at pulmonary centre RSUI Madinah Kasembon, 2016

Appliance of DOTS	The adherence of consuming the medicine					
	Not adhere		adhere		Total	
	n	%	n	%	N	%
Not applied	5	28	5	28	10	56
Applied	1	6	7	39	8	44
Total	6	34	12	67	18	100
Pearson	p=0.299			r=0.259		

The table 3 shows that *Pearson Correlation* statistic result test with significance level $\alpha < 0,05$, the significance score (ρ) was 0,25. It means that research hypothesis H_0 accepted. This Shows that there is no correlation between the appliance of TB-DOT program and the adherence level of consuming the medicine at pulmonary centre RSUI Madinah Kasembon.

DISCUSSION

1. The appliance of TB-DOTS at pulmonary centre of RSUI Madinah

The appliance of DOTS program and the adherence of consuming the medicine at pulmonary centre RSUI Madinah Kasembon. It is caused by the maximum function of treatment supporter (PMO) to remind them in consuming the Anti TB medicine, healing motivating the patient healing that received counseling about TB disease, medication and transmission. Based on the report of Ministry of Health (2014) stated that the treatment supporter has to remind the patient in consuming the medicine, patient healing motivation, and keeping the patient to take medication also remind them to have a routine medical check up at health provider. Besides, treatment supporter derives from a member of the family that trusted by patient or cadre, appointed by health official. Most of the treatment supporters live together in a house to easier them in healing motivation.

2. The adherence of TB patient to consume the Anti pulmonary TB at RSUI Madinah

Table 2 shows that 67% pf TB patient adhere on the consuming anti TB medicine. It was caused by age, education level, gender and duration of treatment in patients with TB. TB medication is not done in a short term. At

least 6 month without interruption, the patient has to consume OAT based on the schedule decided by the doctor. The long term period of TB medication ask a high motivation and commitment from the patients. They have to remember to consume the Anti TB medicine and regularly to go to the doctor. For patients who go through a period of medication for 2-4 months will feel the enthusiasm and highly motivated to recover.

While for them who already receive medical treatment for more than 6 months, especially if the patient does not have the motivation and active PMO motivate healing, will make people feel apathetic to his health condition. Thus it will lead to non-compliance and to increase the treatment period.

Horne (2006) explained that there four things to influence the adherence to consume the medicine, they are:

1. Patient Perception and behavior, For example about the perception of severity sociodemographic variables, personality, including beliefs, attitudes, and expectations that ultimately affect the motivation of the patient to start and maintain the drinking behavior of medications during the treatment process takes place
2. The interaction between the patient and a doctor or nurse and medical communications between the two sides, for example in providing consulting skills can improve compliance, and different messages from different sources turned out to influence the patient adherence in consuming the medicine.
3. The policy and practice of medication in the public created by the authorities, in this case including the TB DOTS program launched by the government
4. The Interventions undertaken to motivate patients to adhere against treatment regimens, such as the application of Trustees Swallowing Medicine (PMO). The support of the family, friends, or people around to remind people, in order to regularly taking the Anti TB medicine for successful medication.

2. The relationship between DOTS program and the adherence of Anti TB at Pulmonary centre at RSUI Medina Kasembon Malang

Table 3 shows that the relationship with the level of implementation of the DOTS TB patient medication adherence using Pearson correlation coefficient was 0.259. It means that the correlation between variables DOTS implementation and the adherence of medication used is strong enough. However it is not significant as it has a significance $p = 0.299$, which is the value is greater than specified, ie 0:05. Because r is positive value, then the correlation between the two variables are unidirectional, meaning where the application of DOTS good, then compliance will also increase, although the correlation is not significant.

This shows that the hypothesis is not accepted, which means there is no relationship between the implementation of the DOTS TB consume medicine with adherence in patients with TB. This might be due to the uniqueness of the sample studied. In this study, samples has been calculated and representative but samples have many variations, such as the age range is presented, there are respondents in different age ranges, so there is no more dominating with each other. They had a history of primary, junior and senior high school, has the same percentage.

The hypothesis of this study was different with the assumption that the adherence take medication regularly need such information, communication and continuous education by health workers. This leads to consumed medication regularl and fairly. Effective communication in oral education on TB patients and treatment supporter will make patients be better to understand and be aware of the disease. Thus they follow the doctor's advice for treatment regularly until completion. Moreover doctor can give education through examining a patient . Then the examining was followed by health workers while still delivering the medicine as instruction requirement.

The Implementation of TB-DOTS also makes the communication between doctor and patient more effective. Also the communication between health care workers to patients who will build perceptions about the disease is more effective as well. Thus, conviction and hope arise that the disease can be cured. This opinion is supported Sugeng Djitowijono (2008). He stated that there is a relationship DOTS strategy approach and

treatment compliance Tuberculosis patient in Puskesmas Sleman.

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EFFECTIVENESS OF COGNITIVE BEHAVIOR THERAPY (CBT) TO REDUCE STRESS IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) PATIENTS

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ABSTRACT

Introduction: Systemic lupus erythematosus (SLE) is a chronic inflammatory autoimmune disease of unknown etiology. The way patients perceive the impact of disease on their physical, emotional, and social function, or health related quality of life (HRQOL), is poorer in patients with SLE (McElhone, *et al.*, 2006). Anxiety and depression, which are frequently caused by daily stress, are the most prevalent psychological disorders experienced by lupus patients, affecting up to 40% of patients in some series (Navarette, *et al.*, 2010). There is a study on the effects of reducing stress in lupus patients using cognitive behavioral therapy (CBT). **Methods:** Search were conducted from PubMed, Science Direct, Google Scholar, and ProQuest. The specific search terms used were “cognitive-behavioral therapy”, and “systemic lupus erythematosus”. The criteria used to search for published studies for this study include: (1) “cognitive behavioral therapy” and “systemic lupus erythematosus”; (2) written in English; (3) studies during 2009-2016. Finally 3 studies were collected and analyzed for this review. **Results:** We found a significant reduction in the level of depression, anxiety and daily stress in the Therapy Group (TG) compared to the Control Group (CG) toms in the TG throughout the entire follow up period. The group of patients who received the therapy improved their level of physical role functioning, vitality, general health perceptions and mental health, compared with the group of patients who only received conventional care. We did not find any significant changes in the immunological parameters. **Conclusions:** Cognitive behavioral therapy (CBT) can cope the stress levels experienced by patients with lupus. CBT is effective in treating lupus patients with high levels of stress, reduce the incidence of psychological disorders associated with lupus, improve and maintain the quality of life (QOL) of patients. CBT had a significant impact on improving the quality of life of patients with lupus erythematosus.

Keywords: Cognitive Behavioral Therapy (CBT), Systemic Lupus Erythematosus (SLE), Stress

INTRODUCTION

Systemic lupus erythematosus (SLE) is a chronic inflammatory autoimmune disease of unknown etiology. It is often discovered in their child bearing years. It affects heterogeneity multiple organs of the body and presents aberrant immunological findings and especially the presence of antinuclear antibodies. The clinical course and prognosis is unpredictable and may be characterized by periods of remissions and chronic or acute relapses. The mortality rate among patients with SLE is at least three times that of the general population. (Aberer, 2010; Ng & Chan, 2007; Ramírez, 2007).

The way patients perceive the impact of disease on their physical, emotional, and

social function, or health related quality of life (HRQOL), is poorer in patients with systemic lupus erythematosus (McElhone, *et al.*, 2006). Anxiety and depression, which are frequently caused by daily stress, are the most prevalent psychological disorders experienced by lupus patients, affecting up to 40% of patients in some series (Navarette, *et al.*, 2010). Daily stress is related impairments in visual memory, fluency and attention in patients with SLE (Peralta, 2006). Many persons with SLE experience high levels of emotional distress. The depression is the most common psychological symptom and the anxiety is another feeling quite frequently experienced. The uncertainty of SLE affects the social life of these people. Chronic fatigue and joint pains

make it impossible for many with SLE to perform to the level expected by themselves and others. This loss of the ability to meet “normal” standards of performance can be very depressing (Parrondo, 2011).

Based on reviews of scientific literature, investigators have suggested that therapeutic interventions should be proposed to reduce psychological distress to improve quality of life and possibly moderate the evolution of chronic and unpredictable diseases like SLE (Bricou, *et al.*, 2004). There is a study on the effects of reducing stress in lupus patients using cognitive behavioural therapy (CBT). CBT represents a unique category of psychological intervention because it derives from cognitive and behavioural psychological models of human behaviour that include for instance, theories of normal and abnormal development, and theories of emotion and psychopathology. CBT therapy could make coping with the disease easier and change patients’ cognitive appraisals of symptoms. Furthermore, the impact of therapy on psychosocial aspects (depression, anxiety, perceived vulnerability to stress, perceived health) and quality of life (QOL) may have implications for longer-term health behaviours and health outcomes. Therefore, it is essential that stress, its psychological consequences and its negative impact on the lives of the patients (Navarrete, *et al.*, 2010).

CBT intervention for SLE leads to greater short term improvement in pain, psychological function, and perceived physical function compared with symptom monitoring and usual care. The CBT program appeared to enhance the participants’ perceptions of efficacy for managing symptoms, maintaining valued activities, and general well being, as supported by relatively large pretreatment–posttreatment effect sizes in self efficacy for managing symptoms, pain interference, and global assessment of function (Greco, *et al.*, 2004).

METHODS

Search were conducted from PubMed, Science Direct, Google Scholar, and ProQuest. The specific search terms used were “cognitive-behavioural therapy”, and “systemic lupus erythematosus”. The criteria used to search for published studies for this study include: (1) “Cognitive behavioural therapy” and “SLE”;

(2) written in English; (3) studies during 2009-2016. A total 15 studies were identified. After reading the full text of the articles, the studies which related to efficacy of cognitive behavioural therapy for SLE was include. Finally 3 studies were collected and analyzed for this review.

RESULT

This literature review examines 3 articles met inclusion criteria. All the studies were ethically approved and research protocol were describe quite well in the articles. Most studies occupied reasonable sample size.

Navarrete, et al (2010) this paper addresses a critically important issue, namely the effectiveness of cognitive-behavioural intervention in improving psychosocial stress and enhancing the well-being of individuals with lupus, using a randomized, prospective study. Navarrete mention a few points that are used in cognitive behavioral therapy to reduce stress levels in patients with Lupus, namely stress management programe. In a stress management program, there are three main points, Psychological, Clinical and QOL. To measure psychological parameters, we used the instruments listed below, which have all been validated in Spanish. The Stress Vulnerability Inventory assesses how vulnerable the subject is to the effects of stress. The Survey of Recent Life Experiences gives an indication of the number of daily stressful events and the degree of stress produced by each of them in the past month, The Beck Depression Inventory is a self administered questionnaire consisting of 21 items that assess the cognitive components of depression rather than the behavioural and somatic ones Spielberger’s State Trait Anxiety Inventory (STAI). To measure the severity of Lupus can use instruments SLE Disease Activity Index (SLEDAI) were used to assess the activity of lupus. SLEDAI consists of 24 items with values preassigned. SLEDAI total score ranges from 0 (no activity) to 105 (maximum activity). To measure quality of life, we used questionnaire SF-36, which is an instrument managed by the 36 questions divided over 8 subscales: physical functioning, physical role, physical pain, general health, vitality, social functioning, role emotional, and health mental. We found a significant reduction in the level of depression, anxiety and daily stress in the TG (Therapy Group) compared to the CG (Control Group) and a

significant improvement in QOL and somatic symptoms in the TG throughout the entire follow-up period. We did not find any significant changes in the immunological parameters. Effects of Stress Management on the Psychological, Clinical and QOL Variables indicate a clinically significant improvement on therapy group. Psychological in TG experienced a significant improvement in both variables at T3 , T9 and T15 compared to baseline. No differences were found in the CG, Depression and Anxiety. The TG made better progress than the CG with regard to both variables. Clinical Variables : SLEDAI the changes observed in the TG were not different from those found in the CG and Somatic Symptoms Scale Questionnaire showed a significant impact on 4 of the 8 subscales of symptoms. QOL (SF-36) the analysis showed a significant impact of the therapy on 5 of the 8 subscales. Moderate to large effect sizes were found for the TG with regard to vulnerability to stress, perception of stress, anxiety, depression, social function, mental health and general health before and after treatment.

Navarrete (2010) in second research mention that the objective of this study is to describe which aspects of the QOL were most affected in patients with SLE, to test which physical and psychological variables are predictive of this, and to assess whether cognitive behavioural therapy aimed at modifying daily stress and other emotional variables can improve the QOL in patients with SLE. The goal of reinforcing the skills acquired in dealing with stress. Therapy sessions dealt with the following: the concept of stress, cognitive restructuring (I), cognitive restructuring (II), cognitive restructuring (III), alternative control strategies mind, relaxation techniques, pain control yourself, social skills training, humor and optimism as a coping strategy. The group of patients who received the therapy improved their level of physical role functioning, vitality, general health perceptions and mental health, compared with the group of patients who only received conventional care. Patients who received conventional care did not experience a significant improvement in any of the QOL variables analysed. Despite this limitation, therapeutic intervention should be proposed to reduce stress and anxiety, improve QOL, and possibly moderate the evolution of the disease. We have not considered the economic factors

or patients who suffer from other concomitant diseases that may have an impact on the QOL. The effective treatment of daily stress and anxiety, predictor factors of a deteriorated QOL, can be linked to a significant improvement in patient QOL.

In the study conducted Eriska Cyprina and Ika Dwi Tyas Yuniar Cahyanti (2013) interventions using are proactive coping methods for stress management in patients with lupus. Proactive coping is a multidimensional strategy which is based on the future. Proactive coping integrate the processes of management of the quality of life with self-regulation to achieve the goal (Greenglass, Schwarzer, & Taubert, 1999, in Greenglass & Fiksenbaum, 2009). Greenglass, Schwarzer, Jakubiec, Fiksenbaum and Taubert (1999) revealed that the Proactive Coping has seven aspects: proactive coping, reflective coping, strategic planning, preventive coping, instrumental support seeking, and seeking emotional support. Results of this study indicate that all four subjects were stressed out and using proactive coping to cope stress caused by Lupus. Subjects did Proactive Coping, Reflective Coping, Strategic Planning, Preventive Coping, Instrumental Support Seeking and Emotional Support Seeking. Adolescent's Proactive Coping With Lupus was influenced by personality and social support.

IMPLICATION FOR NURSING PRACTICE

The literature review has implications for nursing practice, especially in imunematology area. Cognitive behavioral therapy (CBT) effectively to decrease the level of stress experienced by patients with immune system deficiencies such as lupus. With the results of this review, the nurse can apply cognitive behavioral therapy in patients with lupus. CBT can be given and its implementation can be done gradually. Implementation of the therapy can be divided into small groups according to the level of stress experienced by patients, who had previously been measured with a stress scale. The application of CBT is to be composed and relieve the stress experienced.

CONCLUSION

Cognitive behavioral therapy (CBT) can cope the stress levels experienced by patients with

lupus. CBT is effective in treating lupus patients with high levels of stress, reduce the incidence of psychological disorders associated with lupus, improve and maintain the quality of life (QOL) of patients. CBT had a significant impact on improving the quality of life of patients with lupus.

This study suggest to educate nurses about the importance of the implementation of Cognitive behavioral therapy (CBT) in patients with lupus. Further research is needed on the duration of Cognitive behavioral therapy (CBT) and short term effects after application in daily living.

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THE CORRELATION BETWEEN THE DEGREE OF SMOKING BY BRINKMAN INDEX AND THE LUNG VITAL CAPACITY

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ABSTRACT

Introduction: Smoking habits are very hard to remove, though many have been published regarding the harmful effects of smoking and the effects of death can be caused, smoking behaviors have not decreased even tends to increase every year. Smoking can cause changes in the structure and function of airways and lung tissue. Cigarette smoke will accelerate the decline in lung function and a greater influence than the dust of the airways. This study aims to determine the correlation degree of smoke according to Brinkman index with lung vital capacity. **Methods:** This study design descriptive correlation. The sample of 40 respondents male sex in the village Kepanjen Jombang which have a history of smoking until the time of the study with purposive sampling technique. The data collection with interviews and spirometer. Data analysis using Spearman, with a significance level of $p < \alpha$ ($\alpha = 0.05$). **Results:** The results showed 22 (55%) of respondents were smokers and by 17 (42.5%) of respondents have a vital lung capacity is weak. Spearman test results showed a significance of $p = 0.000$ ($p < \alpha$) means that there is a correlation degree of smoking with lung vital capacity with a correlation value of $r_s = 0.898$ and the positive direction of the relationship. **Conclusion:** The decline in lung vital capacity depending on the number of cigarettes smoked every day and duration of smoking history. This is because cigarette smoke is a substance that can irritate the respiratory tract so that the elasticity of the lung tissue into a decline which results in a decrease in vital capacity of the lungs.

Keywords: *degree of smoking, lung vital capacity*

INTRODUCTION

Cigarette has been identified that it contains various chemicals, including tar, nicotine and carbon monoxide (Stoppler, 2010). Cigarette has killed 50% of its smoker, every year, it is nearly six million people are killed as a result of smoking and 600,000 of them are passive smoker. Indonesia is in the third rank country with the most smoker in the world and most of the smokers are not aware of the dangers caused by smoking (WHO, 2013). According to the National Social and Economic (Susenas, 2013) Indonesia is in the first rank in ASEAN countries, the number of adult age of Indonesian population who has smoking habit is 46.16% and the smoking habits in Indonesia has a tendency to increase every year, although the government has formulated a public regulation about the implementation of the region without cigarettes (data and information center of Ministry of Health Affairs, 2013). The smoking habit is very difficult to remove, although there are many announcements

published regarding to the harmful effects of smoking and the effects of death that can be caused, the smoking behavior is never decreased (Kompas, 2012). Nicotine contained in cigarettes is a toxic substance to the nerve cells and can cause addictive effects (Langley & Dickinson, 1889). One of the effects of smoking that causes mortality to increase various diseases of the various organ systems, are such as the respiratory system, sitem, cardiovascular, the nervous system, the immune system, and the digestive system (Burn, 2005; McPhee and Pignone, 2007).

The cigarette smoke is composed of various mixtures of chemicals substance which are in the form of gaseous and particles which are dispersed. Various studies have succeeded to isolate various chemicals up to 400 compounds in cigarette smoke (Benowitz and Fu, 2007). The cigaretteb smoke causes changes in the structure and the function of respiratory system and lung tissue. The cigarette smoke will also accelerate the decline of lung function and the effect is greater than

the dust to the respiratory system (Depkes RI, 2004). The inhalation of cigarette smoke both active and passive can cause respiratory illnesses. The cigarette smoke can irritate the lungs and cause a decrease the vital capacity of lung (Suyono, 2001)

The vital capacity of lung is a reflex of elastic ability of lung tissue, or the strength of the thoracic wall. The decreased of vital capacity of lung means that there is a stiffness of lung tissue or thoracic wall (Alsagaff, 2005). The vital capacity of lung is the maximum expiratory volume after the maximum inspiration, which can be measured with a spirometer (Rahmah, 2008). As it is stated by the theory that the vital capacity of lung can be influenced by several factors, such as age, sex, nutritional status activity and health status (Guyton & Hall, 2011). As the research conducted by Yuma (2014) it was obtained the results that there is a relationship between work period ($p = 0.021$) and nutritional status ($p = 0.00$) to the vital capacity of lung to the workers of stone mill. This study aimed to investigate the correlation between the heavy degree of smoking according to Brinkman index and the vital capacity of lung.

METHODS

In this research, researchers used a descriptive correlational design with *cross sectional* approach. The research population is all male population in the village of Kepanjen RT 08 RW 01 in Jombang District who have a history of smoking until the time of the research. The total sample of respondents were as many as 40 respondents. The sampling method used was *non-probability sampling* with *purposive sampling* type. It consisted of two variables, the independent variable of the heavy degree of smoking using Brinkman index and the dependent variable of the vital capacity of lung. The instrument of the obtaining of the research data used a spirometer tool and observation sheet. The place of the research was conducted in the village of Kepanjen Jombang. The time of the research began in the month of February 2016. The activity in the data collection was done by proposing permission to Jombang Public Health Center or Puskesmas and then it was continued by obtaining the data to the village of Kepanjen according to the list of patients provided by

the public health center or Puskesmas. The data collection was done by interview for data of the heavy degree of smoking and examination the vital capacity of lung using a spirometer. The data analysis used correlation test while using *Spearman* statistical test, with significance level of $p < \alpha$ ($\alpha = 0.05$).

RESULTS

The steps used to answer the purpose of the research is by identifying each of the variables, the identification of variables of the research obtained are as the following results:

- a. The Characteristics of Respondents based on the degree of smoking according to Brinkman Index

Table 1.1 The characteristics of respondents based on the degree of smoking in the village of Kepanjen RT 08 RW1 Jombang District in February-March 2016

The degree of Smoking Percentage	Frequency
Mild 7,5%	3
Medium 55%	22
Severe 37,5%	15

- b. The characteristics of respondents based on the vital capacity of lung

Tabel 1.2 The characteristics of respondents based on the vital capacity of lung in the village of Kepanjen RT 08 RW1 Jombang District in February-March 2016

The Vital Capacity of Lung Percentage	Frequency
Normal 20%	8
Weak 42,5%	17
Abnormal 37,5%	15

- c. The Cross-tabulation between the degree of smoking and the vital capacity of lung

Table 1.3 The Cross-tabulation between the degree of smoking and the vital capacity of lung in the village of Kepanjen RT 08 RW1 Jombang District in February-March 2016

The Vital Capacity	The Degree of Smoking		Total
	Mild	Medium	
Weight			

Normal (0%)	3 (7,5%)	5 (12,5%)	0
Weak (0%)	8 (20%)	0 (0%)	17 (42,5%)
Abnormal (37,5%)	10 (0%)	0 (0%)	15 (37,5%)
Total Number 15 (37,5%)	3 (7,5%)	22 (55%)	40 (100%)

Sperman Test $r_s = 0,898$; $p = 0,000$

Tabel 1.3 shows that the respondents with the mild degrees of smoking have value the highest value, it is as many as 17 respondents (42.5%), while the respondents who have the highest value in the vital capacity of lung are 17 respondents (42.5%). It shows that the degree of smoking will be followed by the decrease of value of vital capacity of lung. The statistical test also shows the significant value of $p = 0.000$ ($p < \alpha$) it means that H_0 is rejected, it means also that there is a correlation between the degree of smoking and the value of the vital capacity of lung, with the correlation value of 0898 which closes to 'one' which means that it has strong correlation with the direction of positive relationship which means that the more severe degrees of smoking, the more abnormal of vital capacity of lung value.

DISCUSSION

Various researches have succeeded to isolate various chemical substances contained in cigarette smoke (Benowitz and Fu, 2007). Most of the substances in cigarette smoke are toxic to cells of the body. The toxic substances which are in the form of gases are such as carbon monoxide (CO), hydrogen cyanide (HCN) and oxides of nitrogen, while the toxic substances which are in the form of chemical substances like nitrosamines and formaldehyde give a toxic effect with specific mechanisms in macromoluculer cells mainly on the respiratory system (Kuschner and Blanc, 2007). The impact that can occur in the respiratory tract due to smoking habits is the changing in the structure of the respiratory track and the lung tissues, the hypertropy occurs in the bronchi mucosal cells and mucus gland gets hyperplasia that causes the narrowing of the respiratory track, while in the lung tissue it can cause any occurrence of an increase of inflammatory cells and a damage to the alveoli (Hans, 2003).

The research conducted by Puspitayani 2012, showed a result of ODS Ratio 7.6 where

the people who have the habit of smoking got more risk 7 times greater to have chronic obstructive pulmonary disease than people who do not smoke. Th chronic obstructive pulmonary disease is a respiratory disease which is characterized by the resistance of air flow of the respiratory tract (PDPI, 211). The biggest mortality rate due to smoking is the occurance of disease on the cardiovascular system, which is 37%, the lung cancer is 28% of and PPOK or COPD is 26%. The cigarette smoke is a free radical that triggers the damage of DNA, the accumulation of DNA damage leads to the decrease of cellular function and leads to the emergence of cancer cells (Hyde, 2009). The diseases that occur in the respiratory tract and lungs causing a decrease in lung compliance, the decrease of lung compliance leds to the decrease of the vital capacity of lung (Guyton & Hall, 2011).

CONCLUSIONS

Smoking is proven to cause a decrease in the vital capacity of lung, the more cigarettes sucked every day and the longer history of smoking, the greater the influence on the decrease of vital capacity of lung. The results of the research shows the value of significance of $p = 0.000$. The exposure of cigarette smoke is a toxic substance that causes hyperplasia and hypertrophy of the respiratory tract, so that the respiratory tract becomes narrower. The cigarette smoke also causes genetic mutations that lead to the appearance of cancer cells in the lungs. The narrowing of the respiratory tract and the damage of the lung cells cause a decrease in lung compliance. All the conditions that lead to the decrease lung compliance would reduce vital capacity of lung.

The vital capacity of lung is influenced by several factors, because the researcher only limits the factor of smoking duration and the number of cigarettes sucked everyday, therefore, for further research it is suggested to be able to include all factors that can influence the decrease the vital capacity of lung with the biggers number of the samples, so that the accuracy of the results of research is more accountable.

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INCREASING FREQUENCY OF DEFECATION WITH THE PROVISION OF JUICE ALOEVERA

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ABSTRACT

Introduction: Bowel movements or defecation is an act or process of living creatures to remove dirt or solid stool or half-solid derived from the digestive system. Aloe vera is a plant which is believed to be effective in addressing a variety of health problems one of which is a digestive problem. This study aimed to determine the effect of aloe vera juice to the frequency of bowel in the elderly in Nursing Elderly Hargo Dedali Surabaya. **Methods:** The design of this study design Quasy Experimental (*non equivalent control group design*). The population in this study is the Overall Elderly in Nursing Hargo Dedali Surabaya Numbering 32 people and the entire sample, using total sampling technique. The independent variable in this study is the consumption of aloe vera juice while the dependent variable is the frequency of bowel in the elderly. **Results:** After the results given aloe vera juice mostly normal frequency by 14 elderly (87.5%) and the control group, while most of the normal frequency of bowel is not as much as 9 elderly (56.2%). Whitney test analysis man in get p value of $0.010 < \alpha (0.05)$, it can be concluded that there is influence of aloe vera juice to the frequency of bowel in the elderly in Nursing elderly Hargo Dedali Surabaya. **Conclusions:** It is recommended this research as consideration for the community to use aloe vera juice as an alternative medicine to address frequency of bowel abnormalities.

Keywords: *aloe vera juice, frequency of defecation in the elderly.*

INTRODUCTION

Defecation is an act or process of living organisms to remove dirt or feces are solid or semi - solid that comes from the digestive system (Corwin, 2010). Defecation is one of the human activities that must be passed in their daily lives. Defecation pattern is highly variable and highly dependent on the function of organs, nervous system, diet, and age. Assessing the defecation pattern means assessing frequency of defecations, stool consistency and color. On the function of organs and the nervous system were normal, the diet plays an important role. Groups of people who have a habit of eating food containing plenty of fiber shows the frequency of defecation smooth with no side effects compared to communities with a poor diet contain fiber, which can result in bowel movement with hard stools. So it is not uncommon cause pain during defecation, which eventually can cause constipation (Tehuteru, 2001).

Aloe vera is a plant that is believed to be effective in addressing a variety of health

problems one of which is a digestive problem. Because aloe vera because it contains aloin (*laxative*) and essential amino acids that make up proteins useful for replacement of damaged cells, as well as the oxidase enzyme, catalase, lipase, and the enzyme protein-digesting enzyme (Purnawanthi, 2002).

The increase in the number of elderly and frail elderly in the population make the frequency of bowel unnatural consider as an alarming phenomenon. As you age, constipation is more apt to occur. An estimated one third of people aged elderly suffer from constipation. Various causes of constipation may be mentioned, among others, lack of fluid consumed, less mobile (sports), less fiber foods, delaying bowel habits, and the side effects of drugs, Constipation is indeed very disturbing someone doing the activity. Even if not immediately treated could give due to the emergence of some diseases such as piles or hemorrhoids, anal canal is torn, and the axis of the intestine protrudes from the anus or in medical terms is called rectal prolapse. (Animous, 2005).

Hard defecation is a problem that a lot of experienced people in the world. The number of events is increasing. For example in the United States each year there are 2.5 million patient visits have complaints one reason is lack of fiber. According Ari Fahrial, Sp.PD-KGEH of the department of gastroenterology RSCM Jakarta, difficulty in defecations refers to bowel movements irregular, usually less than three times a week, in which the stool hard and tough it out, and this condition lasts for three months.

Based on observations made at Panti Tresna Werdha Hargo Dedali Surabaya on April 31, 2013 on the elderly out of the total 32 Seniors in the hostel most of the difficulties in the process of defecations is 16 elderly experienced defecation abnormal this is due to lack of frequency of bowel resulting from constipation, hard stools, pain or hard in the stool.

According Tehuteru said defecation patterns are also influenced by organic factors (the function of organs and systems of nerve fibers) and diet and age. On the function of organs and the nervous system were normal, the diet plays an important role. Risk defecation problem occurs due to an increase in food layover time in the gastrointestinal tract. Time stopped in the gastrointestinal tract increased significantly according to the age when, stool consistency is no longer mushy or watery, but has started to form, and smelled more stinging. Defecation patterns with each other begin to differ depending on the pattern of food. People who eat plenty of fibrous foods will show defecation smooth, not loud, and orderly. This is different from people who do not like to eat fibrous foods. They generally have a pattern of defecation with hard stools. not infrequently cause pain during defecation, which ultimately can lead to constipation. (Tehuteru, 2001).

RESULT

Tabel 1 Increasing Frequency Of Defecation With The Provision Of Juice Aloevera in Panti Tresna Werdha Hargo Dedali Surabaya Juni 2013

Group Freq defecation	Experimens		control		Total	
	n	%	N	%	n	%
Normal	14	87,5	7	43,8	21	85,6
Abnormal	2	12,5	9	56,2	11	34,4
Total	16	100	16	100	32	100

Man whitney test p = 0,010 α (0,05)

Aloe vera plants are not foreign to us. It is evident from the many people who have planted, although it has been long known, only the people who know the benefits and efficacy of this plant. In fact, the content in aloe vera is not just to wash her hair, but also can treat disease, smoothing the skin, nourish hair as well as food - eat, health fibrous functioning retain moisture stool by attracting water osmotic into the stool and stimulate peristalsis colon through a stretch that will smooth the process of defecation, because the effectiveness of aloe vera in overcoming a variety of health problems. Some of the problems mentioned in the journals of them indigestion, regulates gastric acidity, improve the performance of gastric, intestinal microorganisms suppress certain populations, and can function as a laxative and to treat wounds in the intestinal wall (Purnawanthi, 2002).

Research on aloe vera in Indonesia is still very little. Many Indonesian people who do not know what is and what the benefits of aloe vera fiber for digestive problems, generally in the frequency of bowel abnormalities. So in this case the authors are interested in doing research with the title "**increasing frequency of defecation with the provision of juice aloevera** in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya "

METHODS

Experimental research design using quasy (*non equivalent control group design*). The population in this study is overall Elderly in Panti Tresna Werdha Hargo Dedali Surabaya Totaling 32 people and the entire sample, using total sampling technique. The independent variables in this study is the consumption of aloe vera juice while the dependent variable is the frequency of bowel in the elderly

Based on Table 1 can be explained that the Effect of aloe vera juice to the frequency of defecation in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya, the experimental group after being given the aloe vera juice most of the frequencies normally as much as 14 elderly (87.5 %) and a small portion is not as many as two normal elderly control group mostly normal frequency of bowel is not as much as 9 elderly (56.2 %).

Based on the analysis of man Whitney test in getting p value of $0.010 < \alpha$ (0.05), it can be concluded that there Effect of aloe vera juice to the frequency of defecation in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya

DISCUSSION

Defecation frequency in elderly Prior in Panti Tresna Werdha Hargo Dedali Surabaya. Can be explained that the frequency of bowel Frequency Distribution of the elderly before therapy in Panti Tresna Werdha Hargo Dedali Surabaya, the experimental group mostly are not normal frequency of bowel that as many as 10 elderly (62.5%) and a small portion is normally much as six elderly (37.5%) in the control group most of the normal frequency of bowel are not as many as nine elderly (56.3%) and a small portion is normally much as seven elderly (43.8%)

Defecations frequency in older people at Panti Tresna Werdha Hargo Dedali Surabaya

After therapeutic dministration of aloe vera juice 2 times then the frequency of bowel in the elderly in the experimental group largely normal frequency of bowel that as many as 14 elderly (87.5%) and a small portion is not normal by 2 elderly (12.5 %) in the control group most of the normal frequency of bowel are not as many as nine elderly (56.3%) and a small portion is normally much as seven elderly (43.8%). In the field results in the experimental group after treatment there are still 2 who had the frequency of bowel is still not normal, this is because the respondents have limited activity and the respondents always defer to drink the juice of aloe vera at the time of the juice of aloe vera, this may reduce the effectiveness of the content of aloin (*laxatives*) due to oxidation by air. This can lead to less than optimal results aloe vera juice

to both the elderly, so that when the post-test data collection frequency of bowel two elderly continued to contract in the frequency defecations (Glanz, K et al, 2008).

Journal of Alternative Medicine in March 1999 to publish "13 Ways Aloe Vera Can Help You," which mentions the effectiveness of aloe vera in overcoming a variety of health problems (Sudarto, Y. 2003). Some of the problems mentioned in the journals of them indigestion, regulates gastric acidity, improve the performance of gastric, intestinal microorganisms suppress certain populations, and can function as a laxative and to treat wounds in the intestinal wall (Corwin, E. 2010: 12).

Based on the results of research in nursing can be concluded that the elderly who have given aloe vera juice Defecation normal experience, because of the benefits of aloe vera juice that contains aloin serves to maintain the moisture of feces, which can cause defecation frequency becomes normal.

Effect of aloe vera juice to the frequency of bowel in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya

The Effect of aloe vera juice to the frequency of defecation in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya, the experimental group after being given the aloe vera juice most of the frequencies normally as much as 14 elderly (87.5 %) and a small portion is not as many as two normal elderly control group mostly are not normal defecation frequency as much as 9 elderly (56.2 %).

Based on the analysis of man Whitney test in getting p value of $0.010 < \alpha$ (0.05), it can be concluded that there Effect of aloe vera juice to the frequency of bowel in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya. Defecation is one of the human activities that must be passed in their daily lives. Defecation patterns varied and highly dependent on the function of organs, nervous system, diet, and age. Assessing the defecation pattern means assessing frequency of defecation stool consistency and color (Arisman, 2004).

On the function of organs and the nervous system were normal, the diet plays an important role. Groups of people who have a habit of eating food containing plenty of fiber shows the frequency of defecation smooth with no side effects compared to communities with a poor diet contain fiber, which can result in

bowel movement with hard stools. So it is not uncommon cause pain during defecation, which eventually can cause constipation (Hariana, 2008)

From this study, it can be seen that there is the effect of aloe vera juice to the frequency of defecation in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya. This is evidenced by the 14 people already experiencing normal defecation. Thus it can be said that the aloe vera juice has a good effect to overcome the abnormal defecation in the elderly.

CONCLUSION

Defecation frequency in elderly before therapy in Panti Tresna Werdha Hargo Dedali Surabaya, the experimental group mostly are not normal frequency of bowel as many as 10 elderly, in the control group most of the normal frequency of bowel as many as seven elderly. Frequency of bowel in the elderly after therapy in Panti Tresna Werdha Hargo Dedali Surabaya, the experimental group largely normal frequency of bowel as many as 14 elderly, in the control group most of the frequency of defecation is not normal that as many as nine elderly. Based on the analysis of man Whitney test in getting p value of $0.010 < \alpha (0.05)$, it can be concluded that there Effect of aloe vera juice to the frequency of defecation in the elderly in Panti Tresna Werdha Hargo Dedali Surabaya.

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INTERNAL STIGMA CAUSES DEPRESSION ON HIV/AIDS

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ABSTRACT

Introduction: External or internal Stigma on HIV/AIDS patient cannot be denied. It will contribute to psychological disorder such as depression and social isolation if it is not overcome. The impact of depression sustained decline in physical and mental condition, thus affecting treatment. The purpose of the research is to find out correlation between depression level and internal stigma at HIV/AIDS patients. **Method:** This study was a correlation research with cross sectional design. The population of the research was the new HIV patients at VCT Kemuning Clinique in November 2016 at RSUD Dr Soedono Madiun used purposive sampling technique with total sampling 32 patients. The independent variable was internal stigma while dependent variable was depression level. The data analyzed using Spearman Rho test. **Results:** The result shows that 17 respondents got high internal stigma around, 100% depressions. This high stigma was influenced by some factors, they were feeling of fear when other understanding he or she become HIV patient, exaggerated embarrassment due to HIV infection, fearful avoided by society around the place of living. Spearman Rho result showed that $r = 0.570$ with $p = 0.001$ ($p < 0.05$); It means that there is a significance correlation between internal stigma and HIV/AIDS depression levels. **Discussion:** The higher level of stigma, will lead to high level depression. Reducing the HIV/AIDS depression, it is necessary to strengthening the psychological aspect of this patient. It will encourage them to do their daily life. This will also reduce the stigma and they have life motivation and enthusiasm to normal.

Keyword: *internal stigma, depression level, HIV/AIDS*

LITERATURE REVIEW: SCALING UP TUBERCULOSIS CASE-FINDING IN COMMUNITY SETTING

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ABSTRACT

Introduction: Total number of TB deaths are very large. The study result is effective in the control and treatment of TB disease, but there is not discussed the detection of TB in the community order. This study aims to examine the literature, articles, journals and research related to the discovery of TB cases in the order of a community wide scale. **Methods:** The method used in this research method in the journal article searches the database using key words, then after the data obtained, are reviewed research journal articles. Search results are obtained 43 articles and 11 articles that met the criteria of articles / journals were examined in this study. Later articles / journals are reviewed design, sampling, treatment, and outcome. **Results:** The results of the literature review of articles / journals expressed increasing skills in personnel non-medical and increased not only in the understanding of TB cases, but also skills in training, deployment and supervision taking sputum on the power of non-medical as well as the expansion of the area of screening in the community need to be expanded not only in patients with lung disease. **Conclusion:** The increase in non-medical personnel skills in the case-finding /detection of TB cases and TB screening area expansion can reduce the incidence of TB and increase the rate of discovery/detection of TB cases.

Key words : *tuberculosis, case detection, early detection*

INTRODUCTION

Tuberculosis (TB) is a disease caused by the *Mycobacterium tuberculosis* that is transmitted by droplets from one person to another. Lately handling of TB experienced many challenges which are in height incidence of TB-HIV, MDR-TB and MDR DM. Number of TB patients in Indonesia mecapai 5.8% of the total number of people with TB world (MOH, 2011). World Health Organization (WHO) in the Annual report on global tuberculosis (TB) Control in 2003 stated there were 22 countries classified as high-burden countries on tuberculosis (TB). Indonesia is ranked third after India and China in the accounts for tuberculosis (TB) in the world. Total number of TB deaths are very large even though TB is a disease that can be prevented and treated and its spread can be prevented with proper identification and treatment to people affected by TB.

World Health Organisation recommends a strategy to Stop TB through DOTS (Directly Observed Therapy Short Course) to control TB. This strategy is known as the direct supervision of a treatment carried out in health centers and hospitals involved.

Lots of studies on interventions to control tuberculosis and prevent the occurrence of MDR TB. The discovery of the case is an issue that is important in controlling the spread of TB. The stigma of the disease TB is still a barrier to screening TB community. Various interventions have been given to increase public knowledge about TB and decrease the stigma of TB in the community. Studies Arshad et al (2014) have analyzed the intervention and community-based TB control is the result that community-based interventions are effective in the detection and treatment of TB disease, but has not discussed the detection of TB in the community setting. WHO on global TB (2015) raised a theme "Reach, Treat and Care". Need a strategy for finding data "lost" so that they can be treated quickly and do not infect other people. This study aims to examine the literature, articles, journals and research related to scaling up TB case-finding in community setting.

METHOD

The search strategy literatures that is relevant to the topic done using EBSCOhost databases, Proquest, Springerlink, Science direct and Sagepub restricted from January 2013 to

March 2016. The key words are: "screening" "tuberculosis", "case detection", " prevention ". Full text articles and abstracts were reviewed to select the literatures in accordance with the priority criteria. Priority in this review is to choose research primarily aimed at discovery or early detection of TB cases in the community setting as well as provide relevant outcomes. Articles used as a sample are further identified and are presented in Table 1.

RESULT

The research reviewed in this article in accordance with criteria that are using pre post amounted to 2 studies and quasy eksperimen 3 studies, cross sectional 4studies and RCT 2 studies. The intervention used in the study were examined in this literature is by using CCW (Community Health Worker), the use of financial incentives, traditional healers and pharmacists and peer educator. The expansion of the research community in this literature review is broadening screening in postnatal care, household, patients with lung disease, as well as migrants. All the results showed a significant result in increasing numbers of TB case-finding and detection. One of the main components in the discovery of a case or the detection of TB cases in the scope of the community, namely the use of components outside community health workers such as health workers (CCW) (Uwimana et al, 2013), a peer educator from fellow sufferers of TB (Mukungo & Kaboru, 2014), traditional healers (Colvin, et al, 2014) as well as the involvement of civil society organizations. In remote areas, the number of health workers is limited and the distance of health facilities that pretty much become an obstacle in tuberculosis case so that the role of traditional healers such as shamans (Colvin, et al, 2014) as well as community health workers (Uwimana et al, 2013) is indispensable in the treatment of TB. Social culture is also one factor that affects the community about their health and health-seeking behavior, so it is necessary to consider the role of community leaders and traditional leaders in the handling of cases of TB. This is because the success of TB control one of which is a strong social support as well as the election of community leaders who are considered capable of influencing the public related to health (Rodger, 2002). Utilization of health workers in the community is not a new

thing in a variety of health center programs to reach out to the wider community. But in an effort to increase the discovery / TB case detection remains to be done awareness coordinator TB regional to provide training not only the delivery of health education about TB, but also needs to provide training, deployment and supervision taking sputum by health workers and the community designated for TB case detection (Colvin , et al, 2014) as well as the financial incentive for TB case finding (Lee, Chi, Yang, Lo, & Cheng, 2015).

Associated with the expansion of the community area which screening for tuberculosis case besides performed in endemic areas are also on the entire household (McCreesh1, et al., 2016; Harstad et al., 2014; Lorent et al., 2014), patients with pulmonary disease (Gama et al., 2015; Shah1, et al., 2015), patients with post-natal (Ndwiga et al., 2013) and migrants (Schepisi, et al., 2013). Screening migrants from TB endemic countries need to be done during the medical examination with a verbal screening to obtain the data (Schepisi, et al., 2013). Even the study of Gama et al., (2015) suggested that a history of chronic disease a person one could TB recorded in health passport so it is easy to identify individuals suffering from TB. TB screening in the entire order of the household is to consider the local context to identify areas that may be the transmission of TB so it is easier to implement appropriate interventions and can reduce the incidence of tuberculosis (McCreesh1, et al., 2016). It also can increase the discovery / TB case detection, diagnosis and shorten the delay it easier to bring patients to the health service (Lorent, Choun, Thai, & Kim, 2014). Expansion in the area of post natal is to improve discovery / detection of TB cases in pregnant women and prevent transmission to the child.

DISCUSSION

Research that has been explored in the articles in this paper indicate a need for increased skills in the power of non-medical such as health workers, traditional healers, peer educators, community leaders, cadres not only in the understanding of TB cases, but also skills in training, deployment and supervision of decision sputum in non-medical personnel. Besides financial incentives still need to be given to be more active in the discovery / detection of TB cases. The expansion of the

community not only in endemic areas but also a whole needs to be done to map the places / sites that could potentially be a TB transmission. Besides the expansion in other cases, such as in pregnant women also may be one way to reduce the incidence of TB.

TB disease mostly occurs in the community who are poor, marginalized who experience barriers to access to health services, here the role of community nurses needed to be with the health cadre and personnel non-medical designated for more intensive survey and discovery / detection of cases, especially in remote areas , In addition community nurses also need to make training to improve the skills of non-medical personnel in the discovery / detection of TB cases is not only the knowledge about the disease tuberculosis but also skills in recognizing cases of TB and collecting sputum. Apart from the context of increasing skills of non-medical personnel, nurses can also conduct a survey of TB disease in other cases such as post natal services, also on migrants from TB endemic countries.

CONCLUSIONS

The results of the literature review on the research we have done in the 11 journals of TB case-finding in the community need to be awareness coordinator TB regional to provide training not only the delivery of health education about TB, but also needs to provide training, deployment and supervision taking sputum by health workers and the community designated for TB case detection as well as the financial incentive for the discovery of a case. And also need to expand the area of discovery / TB case not only in patients with pulmonary disorders but also migrants, post natal area and also the entire household for mapping a risk of transmission of TB. Nurses need to do passive and active case finding in community (especially in vulnerable areas).

There are some suggestion from this reviaew. The first is need to undertake training of TB screening and sputum collection to non-medical personnel and evaluated for effectiveness and efficiency. The second is need to do screening total households and made mapping areas that are at high risk for experiencing TB transmission. The last is need to do TB screening at airports, especially on migrants coming from TB endemic areas.

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AFFIRMATION-TAPPING AS A MODEL OF EMOTION MANAGEMENT TO HELP ACHIEVE THE TARGETED-THERAPY BLOOD PRESSURE IN HYPERTENSIVE PATIENTS

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ABSTRACT

Introduction: Prevention of hypertension complications aims to control blood pressure through medication and emotional control to achieve the target blood pressure therapy. However, the extent to which patients with hypertension to manage personal emotions and emotional control efforts to control blood pressure assessment has not been done. This study aims to investigate whether Affirmation-Tapping can achieve improved therapeutic target blood pressure in hypertensive patients. **Methods:** This study was a descriptive comparative, posttest-only control group design. The population were hypertensive patients in the health center outpatient Pacarkeling Surabaya. The number of samples was taken twenty patients with simple random, then do the Randomized Assignment into the treatment and waiting-list group for each ten patient. They have signed a Letter of Approval and follow Affirmation-Tapping (AT) after receiving an explanation. The research instrument with the Geneva Emotion Wheel; data analyzed used Mann-Whitney test. Ethical Clearance was obtained from the Research Ethics Committee of Ministry of Health Surabaya Polytechnic. **Results:** The results showed all participants with hypertension and diabetes and half of the participants over the age of more than equal to sixty years old, and women. Both groups acquire basic treatment of hypertension. The treatment group have been followed for three months AT.

Systolic blood pressure reached 90 % in the treatment compared to 50 % in the waiting list group. Diastolic blood pressure reached 100 % in the treatment compared to 20 % waiting list group. Analysis of differences in the two groups conducted by rejecting H_0 when $p < \alpha = 0.05$. Mann-Whitney test results for the systolic blood pressure is $p = 0.022 < 0.05$, and the results of the Mann-Whitney test for diastolic blood pressure $p = 0.015 < 0.05$. Then H_0 is rejected, so the AT has been able to control blood pressure in hypertensive patients. **Conclusions and suggestions:** AT emotion management model can improve achievement of therapeutic-target blood pressure in hypertensive patients and is recommended as a complementary therapy in hypertensive patients.

Keywords: Hypertension, Targeted-therapeutic blood pressure, Affirmations-Tapping, Emotion Management Model, Nursing complementary

THE CORRELATION BETWEEN LEVEL OF EDUCATION AND EXPERIENCE FAMILIES WITH COPING MECHANISMS OF HIV POSITIVE MOTHERS FAMILY IN TULUNGAGUNG

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ABSTRACT

Introduction: Incidence of Human Immunodeficiency Virus (HIV) among housewife in Tulungagung reached 200 cases in 2014. Stress experienced by sufferers will be increase with family members maladaptive behaviors, there for could affect the healing process and increased mortality. This study aims to determine the factors associated with coping mechanisms of HIV-positive mothers family in Tulungagung. **Methods:** The design of study used was descriptive correlation with cross sectional approach. The populations were 15 families of PLHA (People Living with HIV/AIDS). Sample of 7 people were taken by purposive sampling technique. The independent variable was the level of education and family experience. The dependent variable was the coping mechanisms of HIV-positive mothers family. Data collection was done at home companion PLHA and CESMiD foundations using questionnaires. Data analysis was performed with Spearman Rho test with significance level $p < 0.05$. **Results:** The results showed that the level of education has no relation with the coping mechanisms of HIV-positive mothers family. It was evidenced by the results of correlation test showed $p = 0.576$ and $r = 0.256$, while experience families a significant result with a coping mechanisms of HIV-positive mothers family. It was evidenced by the results of correlation test showed $p = 0.046$ and $r = 0.764$. **Discussion:** It have been can concluded that it has no relation between level of education and coping mechanisms of HIV-positive mothers family, and it was a correlation between the family's experience with family coping mechanisms of HIV-positive mothers. Further research should provide intervention to families of PLHA in managing effective coping to reduce stressor as a result of caring for HIV-positive mothers.

Keywords: *education level, experiences family, coping mechanisms*

HEALTH PROMOTION STRATEGY ON HIV-AIDS IN THE AFFECTED AREA ON MOUNT MERAPI YOGYAKARTA

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ABSTRACT

Introduction: HIV-AIDS is a global health problem leading cause of death in Indonesia. Discussion with spiritual leaders on the Mount of Merapi Yogyakarta said that after volcanic eruption lot of sand miners from outside the area have arrived with bringing commercial sex workers (CSWs). Furthermore, local people access CSWs for having free seks as well. This situation will contribute to sexual transmission infections (STIs) so that providing health education on the prevention of HIV-AIDS is essential asaim of the study. **Method:** Topics of health education included HIV-AIDS, prevention of HIV-AIDS transmission from mother to child, and medical and herbal therapies to increase immunity conducted by lecturer and discussion. **Result:** This study concludes that health education is good way to share knowledge in order to improve better understanding on HIV-AIDS. **Discussion:** Further studies, participatory approach from community will provide a good entry point to addres vulnerability to HIV-AIDS, and engaging community in participating voluntarily counselling test (VCT) is efficient way in HIV prevention, care, and treatment.

Keywords: *health education, HIV-AIDS, VCT*

DRUGS SUPERVISOR ACTIVENESS CORRELATED WITH MOTIVATION AND TUBERCULOSIS MEDICATION ADHERENCE

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ABSTRACT

Introduction: Tuberculosis is a major problem in the world which is need a focus treatment, particularly to prevent the spread and development of drug-resistant cases. Tuberculosis drug supervisor plays an important role in realizing government's program "Indonesia without Tuberculosis in 2020". The purpose of this study was to provide information about the correlation of drug supervisor activeness with motivation and medication compliance. **Method:** This study was a cross sectional approach. The population was patients who underwent pulmonary TB treatment in Puskemas (Public Health Center) Pare and Sidorejo. The respondent were 35 patient taken by purposive sampling. The independent variable was the activeness of the drug supervisor, while the dependent variable was motivation and Tuberculosis medication adherence. Collecting data used questionnaire and was analyzed using Chi Square statistical tests with significance at level <0.05 . **Result:** Statistical results showed significant correlations between the drug supervisor activeness with the patient's motivation ($p=0.000$) and adherence to ingest drugs Pulmonary Tuberculose ($p=0.001$); either between motivation and adherence to ingest drugs Pulmonary Tuberculose ($p=0.011$). **Discussion:** Drug supervisor has to actively motivate patient with tuberculosis in order to increase their medication adherence. Health care unit could enhance the drug supervisor activeness and patient's motivation in order to prevent the spread of tuberculosis.

Keywords: *pulmonary tuberculosis, drug supervisor activeness, motivation, and medication adherence*

EFFECTIVENESS OF LAVENDER AROMATHERAPY ON ANXIETY LEVEL: A LITERATURE REVIEW

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ABSTRACT

Introduction: The aim of this review was to analyse the empirical studies that focus on effectiveness of lavender aromatherapy on anxiety level. Anxiety is a fear or worry in certain situations that cause anxiety. Anxiety is a normal thing experienced by every human being but if excessive can disrupt the physical and mental function. One alternative therapy that can be use to lower the level of anxiety is a aromatherapy. The lavender aromatherapy contains linalool and linalyl acetat to give relaxant effect, sedative, and mood improvement. **Method:** The literature search used Google Scholar, Ebsco, and ProQuest databases (in the range of 2013-2015) was conducted using the keywords: lavender aromatherapy and inhalation and anxiety level or stress level. After the process, 6 empirical articles were included in the review, with informants ranging from preoperative and postoperative patients, older people, and schizophrenia patients. Based on the analysis, the reviewed research seems to decrease of anxiety levels were measured with DASS-21 or HRS-A's instruments and decrease of vital signs (heart rate, SBP and DBP), but in others research which using randomized control trial method showed no significant differences in mental stress score and vital signs between the intervention group and the control group. **Result:** The lavender aromatherapy can reduce anxiety level by inhalation process starts from the olfactory to the central nervous system which influence the sympatic and parasympatic nerve until the resulting effect of relaxation and mood improvement.

Keywords: *Anxiety level, Vital Sign, Inhalation, Lavender Aromatherapy*

INTRODUCTION

Anxiety is a fear or worry in certain situations which very threatening situation that causes anxiety because of the uncertainty in the future, the fear that something bad will happen. Anxiety symptoms appear may be agitated, panic, tremor, heart pounding, irritability, avoiding others, insomnia, and difficulty concentration. Anxiety comes from a feeling unconscious on their own personality and not associated with real objects or situation that actually exist (Singgih Gunarsa, 2008).

The prevalence of stress is increasing, both from the public in urban and rural areas. In this global period, stress tends to be more common in people with high levels of the economy than people with low levels of the economy, though there are differences than the stress levels experienced by each of the community groups (Pande, 2013). Basically, anxiety is a common thing experienced by every human being, accompanying the development, change, new experiences that have never been done. But when anxiety occurs excessively and continuously will

disrupt the physical and mental function of a person in his life. So far only anxiety can be reduced by pharmacologic therapy and psychotherapy, but many people choose to use alternative therapies because it is cheaper and safer, one of which is an aromatherapy (Suriyati et al, 2015). Aromatherapy is an alternative therapy treatment or using essential oil (pure oil extract) that can be administered by inhalation, massage, compress, or bath.

Appleton (2012) describes that lavender contains linalool and linalil acetate which have the effect of antidepressant and anxiolytic. Lavender aromatherapy was given by inhalation to stimulates olfactory nerves and the central nervous system responded and to reduce the secretion of cortisol and produce relaxant that can inhibit the activity of the sympathetic and the release of acetylcholine, and increases the parasympathetic system so as to provide a relaxing effect and positive feelings (Pande, 2013). Nevertheless, there are some articles that mention that the granting of lavender aromatherapy to reduce the anxiety level has a potential bias and the results are not

reliable, therefore the authors are interested to study literature review to determine "effectiveness of Lavender Aromatherapy on the level of anxiety" based on evidence based (study of the facts) with the critical appraisal stage

RESEARCH AND METHODE

The aim of this study was to review and describe published empirical studies that focussed on effectiveness of lavender aromatherapy on anxiety level. This is a preliminary assessment of the potential size and scope of the available research literature and aims to identify the nature and extent of research evidence.

Start from a question "Is the lavender aromatherapy essential oil can reduce the level of anxiety?", Then continue doing search engine via Google Scholar with keywords "effectiveness of lavender aromatherapy", as well as through Ebscho and ProQuest with keyword "Lavender aromatherapy and inhalation or massage and anxiety level or stress level.". The search is limited to articles in 2013-2015 found 12 journals, then made a critical appraisal selected six relevant journals, the others journal as supporting articles.

RESULT

This literature review examines six journals true experiment to identify the effect of lavender aromatherapy on anxiety level. Research conducted by Bikmoradi et al (2015), using a single-blinded randomized control trial on a sample of 60 post-CABG patients were divided into 2 groups (intervention and control) randomly. In the intervention group inhaled 2 drop 2% lavender essential oil was given through O2 mask for 20 minutes on days 2 and 3 post operation while the control group was given distilled water inhalation technique and the same duration in the intervention group. Observer and the interviewer does not know the treatment given to the patient and then the evaluation carried out by another researcher. The result was no significant difference in the average score decrease mental stress and vital signs in the second group. The advantages of this study to evaluate the use of the instrument DASS-21 and changes in vital signs such as heart rate, SBP and DBP, while shortcomings provide interventions are only given for 2 days

Reinforced by research Nategh et al (2015) using the method of a single-blinded, randomized control trial on a sample of 110 patients with ACS were divided into 2 groups (intervention and control) randomly. In group intervention given 2 drop (40 mg) lavender essential oil on the towel to be placed in the collar of the patient then the patient is asked to breathe normally for 20 minutes, is done 2 times / day (morning and evening before bedtime) for 3 days in a row while the control group was given a drop of almond oil, and a period equal to the duration of the intervention group. The results obtained are contained decrease in SBP, DBP, and heart rate in both groups but no significant differences in changes in vital signs in either group. The advantages of this research involves a lot of samples, while shortcomings in the evaluation of vital signs and provide interventions for 3 days.

Subsequent research conducted by Suryati et al (2015) using the method quasi experimental without a control group, with the design of one group pretest posttest on sample 15 elderly by intervening inhaling lavender aromatherapy 15 minutes for 14 days. The results obtained are found significant reduction in anxiety levels. Disadvantages of this study using a small sample, the timing of the intervention is only 14 days, as well as an instrument to evaluate the level of anxiety just using HRS-A.

Furthermore, research by Shun Kwan Tang and Mimi Tse2 (2014) using the method of quasi-experimental pretest and posttest control group design study on a sample of 82 elderly people who were divided into 2 groups (control group 38 and 44 the intervention group). In the intervention group of respondents use the technique of "deep breath exercise" and breathe in botl aromatherapy spray that contains lavender essential oil: bergamot: lavender hydrolat with a concentration of 2: 1: 2.5 20 min / session, conducted one week for 4 weeks and continued at home, while the control group did not do any intervention. The results obtained are significant impairment to post DASS intervention in the intervention group and there are significant differences between the intervention group with the control group. Disadvantages of this study only used the instrument DASS-21 and did not explain the

amount and duration of use of aromatherapy at home.

Subsequent research by NPM Yantini Pande et al (2013) using a pre-experimental one-group pretest and post-test on a sample of 30 people who were given the intervention lavender aromatherapy every day for 1 month. The results obtained are no significant effect on anxiety Award lavender aromatherapy treatment of schizophrenia in Bali Province RSJ. Disadvantages of this study to the second division of the sample group is not the same in amount, not described pmerian technique and duration of the intervention, and only evaluate the level of anxiety that are not described using any instruments.

Recent research by Arwani et al (2013) using the method of quasi-experimental one group without control group on a sample of 40 people were given the intervention by dripping 5 drops of aromatherapy (lavender oil) on the masks to be worn for 15 minutes. The results obtained are contained decreased levels of patient anxiety before surgery. Limitation of this study is not described using sampling techniques, it is not clear how long a period and the evaluation of interventions for anxiety levels using only instruments HRS-A.

The studies above are good and the author agrees with the results obtained, ie no effect of lavender aromatherapy to decrease the level of anxiety. But even so, the author will be more amenable if the studies conducted in a double-blinded randomized control, as well as to evaluate the level of anxiety by using an instrument DASS-21 or HRS-A, vital signs, and the levels of cortisol in the blood so that the results are valid and reliable for assessing the effectiveness of lavender aromatherapy against anxiety level. However, the six journals over a maximum of only evaluate the level of anxiety using the instrument DASS-21 or HRS-A and vital signs only when when the body is stressed, the anterior pituitary will menstimulai hormone ACTH which in turn will increase the response of the adrenal glands to secrete the hormone cortisol (Anderson, 2009)

DISCUSSION

This review demonstrated that empirical research on lavender aromatherapy has long been known as one of the complementary therapies that can cause a relaxing effect. The aromatherapy is one type

of alternative therapy using liquid material plant volatile, known as essential oils to affect mood or the health of someone who has been there since 6000 years ago but only used on 1920 (<https://id.wikipedia.org>). Appleton (2012), describes lavender contains linalool and linalyl acetate which have the effect of antidepressant and anxiolytic (Pande, 2013). Lavender essential oil is given by inhalation will stimulate neural olfactory and responded to by the hypothalamus of the brain which then stimulates the limbic system and anterior pituitary to decrease the secretion of the hormone ACTH and cortisol from the adrenal gland, inhibiting the activity of the sympathetic and the release of acetylcholine, and increases the parasympathetic system so as to provide a relaxing effect , sedatives, and improve mood (Anderson, 2009)

Aromatherapy consists of various shapes and scents. In research Nategh et al (2015), a control group given aromatherapy almond intervention. It should not be necessary. The control group was given distilled water only enough for almonds also contain many important nutrients to mitigate some diseases. One cause of concern is the presence of a physical disorder, if the cause is resolved with the almond aromatherapy granting the anxiety level would be decreased. This is supported by an online literature explain that almond contains lot of vitamins, minerals, protein, antioxidants effective for skin care, hair, digestion, lower cholesterol, and anti-pain (www.amazine.co). This literature review has implications on mental health nursing care, but these results are not fully generalizable because of anxiety may also be affected by physical condition, past experienced, and the environment (Singgih Gunarsa, 2008). The application of lavender aromatherapy has a high applicability value, because of according Jaelani (2009), the use of aromatherapy is simple, relatively inexpensive, can be done in many places and circumstances, practical and efficient, as well as the effects of substance caused quite safe for all ages. However, before using it must be ensured first had no history of hypersensitivity to certain odors (Suriyati, 2015). These articles used some of the terms that are common and anxiety levels evaluation instruments are already familiar and often carried out by nurses in caring for clients. Therefore, it is not required special time to intervene like this in the room.

Clients are expected also not be difficult to do so because of this intervention would likely cause tranquility.

CONCLUSION

Anxiety is a fear or worry in certain situations that cause anxiety. Anxiety is a normal thing experienced by every human being in the process of life. However, excessive anxiety can cause physical and mental disorders due to cause some of the symptoms, such as anxiety, trembling, palpitations, irritability, avoiding others, insomnia, and difficulty concentrating. One alternative therapy to reduce anxiety levels that use lavender aromatherapy. Lavender contains linalool and linalyl acetate to give effect relaxant, sedative, and improve mood

The results of the analysis of some of the articles were found that aromatherapy can reduce the level of anxiety, heart rate, SBP and DBP significantly, but in studies using randomized controlled trials showed that there was no significant difference between the change in the intervention group with the control group. Based on these results it can be concluded that the lavender aromatherapy can reduce the level of anxiety through inhalation physiological process that starts from the olfactory to the central nervous system until the resulting effect of relaxation. However, further research is needed on the effectiveness of lavender aromatherapy against anxiety level by using the method of double-blinded randomized trial and the evaluation is intended to measure the level of anxiety, vital signs, and the levels of cortisol in the blood so that the results are valid and reliable.

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RELATIONSHIP BETWEEN COPING MECHANISM ORIENTATION AND ANXIETY LEVEL IN HEMODIALYSIS CHRONIC RENAL FAILURE PATIENTS

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ABSTRACT

Introduction: Chronic Renal Failure is an irreversible and progressive kidney failure, thus hemodialysis has been proved to be the most effective treatment modality but also cause anxiety and coping mechanism is needed to overcome anxiety. The purpose of the study is to analyze relationship between coping mechanism orientation and anxiety levels in chronic renal failure patients on hemodialysis at RSUD Prof. Dr. Margono Soekarjo Purwokerto. **Method:** This study used descriptive correlation design with cross sectional approach. Independent variable was coping mechanism orientation and dependent variable was anxiety. Population were patients with chronic renal failure undergoing routine hemodialysis and sample were 33 respondents taken by purposive sampling. Data were collected using questionnaire brief COPE and SAS and analyzed by using Spearman Rank correlation test with level significant $\alpha=0.05$. **Result:** Result showed there was relationship between coping mechanism orientation and anxiety level ($p=0.01$, $r=-0.846$). **Discussion:** The conclusion was coping mechanism orientation which is combined problem-focused coping and emotional-focused coping when deal with stressors can reduce the level of anxiety during the hemodialysis process. Future studies are recommended to develop coping interventions to decrease anxiety level.

Keywords : *Coping mechanism orientation, anxiety, hemodialysis*

INTRODUCTION

Chronic renal failure is irreversible and progressive disease and hemodialysis is the most effective modality therapy (Gerogiani, 2014). Hemodialysis may have an impact on physical health, psychological, spiritual and socio-economic status of patients (Charuwanno, 2005). Patients should be a lot of adjustments such as lifestyle, diet, jobs, roles and functions in the household, and adjustments to the hemodialysis process can be a stressor. If the patient can not adapt to stressors, the patient at risk for psychological problems in therapy. One of the psychological problems that often occur in patients with renal failure is the anxiety (Rahimi, Ahmadi & Ghoyalf, 2008).

According the United State Renal Data System (USRDS) incidence of chronic renal failure in the United States in 2012 is 114.813 people. Based on Health Research (Risksedas) 2013 the prevalence of chronic renal failure in

Indonesia 0.2%, while for the province of Central Java chronic renal failure is 0.3%. Based on data obtained from the medical records of hospitals Prof. Dr. Margono Soekarjo Purwokerto from January until August 2015, patient with chronic renal failure are 776 patients, and 137 patients undergo hemodialysis therapy. Interviews conducted in October 2015 was showed from 10 patients, 57.14% experienced mild anxiety, 28.51%, moderate anxiety and 14.28% had severe anxiety. Anxiety is experienced as feelings of worry, anxiety and fear, sleep disturbances. It is caused by the uncertainty of the status of the disease, medical expenses, loss of freedom, dietary changes as well as the loss of a job. First time patient is diagnosed with chronic renal failure and had to undergo hemodialysis in the long term lead patient in worried feeling. It is about the pain experienced as well as the treatment that will be undertaken, in addition to the employment status, marital status in the family, social life

and personal life, the effects of disease, diet, the time, feeling of disability, psychological pressure from fears of death, all of it is a stressor for patients that can lead to anxiety (Sousa, 2008 in Maracon, 2014). Patients are required to be able to respond by assessing and

interpreting the existing stressors (Appraisal and interpretation of the stressor). According to Stuart & Laraia (2005) there are five responses to stress, they are cognitive, affective, physiological, behavioral and social. While the use of the resources of coping such as economic assets, capabilities and skills, defense techniques, social support, motivation, health, spiritual support, trust positive, problem solving, social skills, source material and social, and physical well being possessed her This study aimed to analyze the relationship between orientation coping mechanisms with the level of anxiety in patients with chronic

to do the coping mechanisms. According to Lazarus (1991 Kozier, 2004), individual coping mechanisms are of two kinds, namely problem-oriented and emotional-oriented coping mechanisms. The coping mechanisms serve to solve problems, adapt to change, and the response to a threatening situation. If the individual has a good coping mechanism that individuals will be free of stress, otherwise if owned coping mechanisms is lacking, then the individual will experience stress (Lazarus & Folkman, 1978 in Nursalam, 2013). The ineffectiveness of the coping mechanisms can result in anxiety responses, because it is perceived as a threat to the patient (Sousa, 2008 in Maracon, 2014). Anxiety is a normal reaction to stress and can develop into more extreme and cause mental health problems and impact on the decline in the quality of life in patients chronic renal failure undergoing hemodialysis. renal failure undergoing hemodialysis in hospitals Prof. Dr Margono Soekarjo Purwokerto.

Anxiety Level	Coping Mechanism Orientation							
	Problem oriented		Emotional Oriented		Problem and Emotional Oriented		Total	
	Σ	%	Σ	%	Σ	%	Σ	%
No	1	3	0	0	0	0	1	3
Mild	2	6,05	2	6,55	0	0	4	12,1
Moderate	8	24,25	7	21,52	4	12,12	19	57,6
Severe	5	15,16	1	3,03	3	9,09	9	27,3
Total	16	48,48	10	30,30	7	21,21	33	100,0
<i>Spearman Rank</i>			$p = 0,01; r = -0,846$					

METHODS

This research uses a correlational descriptive design with cross sectional approach. The population is patients with chronic renal failure undergoing hemodialysis in hospitals Prof. Dr. Margono Soekarjo Purwokerto. Sample is 33 respondents obtained by purposive sampling. The variables are coping mechanisms orientation as the dependent variable, level of anxiety as independent variables and confounding variables include sex, marital status, occupation, monthly income, and health insurance and intradialysis complications. The instruments used in data collection was a questionnaire. Brief COPE questionnaire to measure the orientation of the coping mechanisms and SAS / SARS questionnaires Indonesia's version to measure anxiety levels. Research is conducted at the hemodialysis unit Prof. Dr. Margono Soekarjo Hospital, Purwokerto on January 19 to January 21, 2016. This study has been carried out ethics clearance, proved by certificate No.10/KKEPK.FKG / I / 2016.

RESULTS

Results show p value = 0.01 and $r = -0.846$, it's mean there is significant relationship between coping mechanisms orientation and the level of anxiety (Table 1.1)

Respondents who did not experience anxiety using coping mechanisms orientation focuses on the problem 1 respondent (3%). While respondents were experiencing mild anxiety, 2 (6.05%) using coping mechanisms orientation to problems-focused and 2 (6.05%) emotional-oriented. Respondents who experience anxiety, 8 people (24.25%) tend to use coping mechanisms problem-oriented, 7 respondents (21.22%) prefer emotional-oriented and 4 respondents (12.12%) using coping focused on emotions and problems. The results also showed that respondents with severe anxiety level 5 people (15.16%) using problem-focused coping, one person (3.03%) focuses on emotions and 3 persons (9.09%) focused on emotions and problems

Statistical analysis showed a negative correlation, it is mean if respondents use problem and emotional-oriented coping mechanisms, the level of anxiety is getting lighter, whereas if respondents use the coping mechanisms emotional-oriented or problems-oriented only, the level of anxiety will be heavier.

DISCUSSION

Based on the results, respondents who undergo hemodialysis therapy majority using problem-oriented coping mechanisms. Coping mechanisms problem-oriented is a coping mechanism focuses on the causes of stress (Lazarus 1991 Kozier 2004). Respondents perceived stressor is his health condition which is unpredictable and changes in lifestyle. Responses appear in the respondents with coping mechanisms problem-oriented is always looked optimistic when facing problems and feel confident that there will be a favorable settlement, including issues related to their health condition. So respondents always try to do the best in order to maintain their health, including the routine hemodialysis in accordance with the schedule.

Respondents with emotion-oriented coping mechanism aims to control emotionally. Observed behavior is the tendency to seek social support, positive

reinterpretation, acceptance, worship, emotional and denial (Carver, Scheier & Weinsraub 1989 in Weiten, Dunn & Hammer 2009). Respondents seek sympathy from others around them, considers his problems have benefits for themselves and to make people better, the conditions are condition that can not be avoided, the more resigned and put their trust in God, but not infrequently the respondents deny and denies that it happened and thought is not experiencing problems. Respondents with emotional-oriented are always trying to control the emotional response he felt.

Based on the results, respondents who use coping mechanisms oriented and emotional problems and suffered severe anxiety level. Lazarus & Folkman (1984) explains, individuals can use to deal with stress coping mechanisms emotional and problems oriented. It can be said as the best coping because it is able to balance the two, both on issues and emotions. The results of this study are not in accordance with the opinion of Lazarus & Folkman (1984), severe anxiety faced, caused by fears of a client to death, their physical limitations in performing daily activities and comorbidities on the client, but researchers in conducting this study did not assess deeply related diseases and linking clients between the degree of the disease to the level of anxiety. The response seemed to be often complain of headaches, can not sleep because of frequent nightmares, especially death, focused on himself. Respondents were less focused when talking and just focus on yourself.

Severe anxiety experienced by the majority of respondents were female. The results are consistent with research conducted by Rasoul (2005) which states that anxiety with a higher level is more common in women than in men. Anxiety in women caused by nature women are more sensitive to stressors compared with men. The anxiety felt by the respondents because the client feels related defects current condition, changes in the social life and the uncertainty of the disease. The response that came up was hard to sleep because of restless and often face felt hot.

Based on the results of the study most of the respondents have moderate anxiety level. The results are consistent with research Rostantina (2006) that 61% of respondents had a moderate level of anxiety and respondents

tend to use one type of coping mechanism orientation, which focuses on the problems or focusing on emotions. Anxiety being experienced due to a change in the psychological aspect. Besides the restrictions on the types of food and changes in the pattern of life lived affecting psychological condition, because the respondents felt very limited and dependent on the others and could not carry out its role and function in the family.

Another response that arises is physically and cognitively. Respondents complained it difficult to sleep, hands become cold and wet as well as more sensitive and easily upset the little things that are not in accordance with what they want. These results are in line with Stuart (2009) which states that the response of anxiety specially cognitive and fisiological form.

The study found that the level of anxiety being experienced and the tendency to use coping mechanisms focused on the problem is more common in men, according to research conducted by Billings and Moos (1984) that respondents with gender male will tend to choose a coping mechanism problem-oriented, it is associated for their gender .

CONCLUSIONS

The orientation of the coping mechanisms of patients with chronic renal failure undergoing hemodialysis in hospitals. Prof. DrMargonoSoekarjoPurwokerto oriented to the problem to be doing active coping, planning, focus on the problem, restraint and seek social support.

The level of anxiety of patients with chronic renal failure undergoing hemodialysis in hospitals Prof. Dr. MargonoSoekarjoPurwokerto are at the level of anxiety was due to changes in the psychological aspect, namely diet, changes in the role and functions of the family preformance. Responses appear on the client is in the form of insomnia, hands become cold and wet, and the client is more sensitive and easily upset the little things that are not in accordance with.

The use of coping mechanisms orientation focuses on the problems and emotions cause mild anxiety level, otherwise if using a coping mechanism that focuses on a single issue or emotion just then having severe anxiety levels.

difference and are expected as being active in the environment. Respondents would prefer to answer the question stating for always trying to solve problems.

Mild anxiety level experienced by the respondents either using a coping mechanism to focus on the problem and focus on emotion. Mild anxiety causes people become alert and increase the field of perception (Stuart 2009). The use of both types of orientation of the coping mechanisms that can overcome anxiety. Mild anxiety that occurs in respondents when thinking about the dialysis process, especially the emergence of feelings of worry when done needling, worried that a sudden blockage in blood vessels and the respondents feel the loss of freedom because they have to follow the diet prescribed. Respondents felt traumatized by the blockage of blood vessels which require repeated injections do. Response anxiety felt was pain in the stomach and heart palpitations. While the problem-oriented respondents will tend to choose to remain on the restriction diet for health reasons, while respondents were oriented on emotions tend to try to control anxiety to perceived stressors

Patients with chronic renal failure undergoing hemodialysis can identify coping mechanisms used in order to utilize coping resources within themselves to overcome anxiety that is felt in undergoing hemodialysis

The profession of nursing to develop nursing interventions clients with anxiety coping mechanism in accordance with the orientation of the client .

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THE EFFICACY OF COGNITIVE BEHAVIOR THERAPY (CBT) FOR REDUCING ANXIETY AND INCREASING SELF-EFFICACY IN THIRD TRIMESTER PRIMIGRAVIDAE

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ABSTRACT

Introduction : Psychological problems commonly experienced by pregnant women especially primigravidae are anxiety and fear. Prenatal classes is used to manage anxiety and low self-efficacy in pregnant women. However, it is still not enough. This study aimed to prove the efficacy of CBT for reducing anxiety and increasing self-efficacy in third trimester primigravidae. **Method**: This is a pre-experimental study with the one group pretest posttest design approach. The population was all third trimester primigravidae at Kendangsari Mother and Child Hospital, Surabaya. Samples were third trimester primigravidae who experienced anxiety, answered self-efficacy questionnaire, met the inclusion criteria and willing to be a research subject. Sample size was 10. The statistical test used to determine the influence of independent variable toward dependent variables was Wilcoxon Signed Rank test. **Result** : CBT could lower the anxiety level ($p= 0.007$), CBT could improve self-efficacy ($p= 0.007$) in third trimester primigravidae. **Discussion** : CBT has been able to reduce anxiety. In the process, CBT encourages clients against their negative thoughts and figure out how more positive thoughts could change the level of anxiety becoming lower. CBT in the process turns client's mind into more positive thought that will be resulted in changing feelings (affection), so that positive behaviors implemented could reduce anxiety level. Declining anxiety level individual could control the situation, produce positivethings and increase self-efficacy.

Keywords: *Cognitive Behaviour Therapy, Anxiety, Self-Efficacy*

EFFECTIVENESS OF COLOSTRUM AND DRY GAUZE AS TOPICAL TREATMENT TO ACCELERATE SEPARATION TIME OF UMBILICAL CORD

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ABSTRACT

Introduction At this time, dry gauze technique used as one of methods for umbilical cord treatment in newborn babies. However, it affects in prolongation separation time of umbilical cord and increasing incident infection as well. The purpose of this study was to identify separation time of umbilical cord using colostrum as topical treatment compare with dry gauze. **Method** Quasy Experimental design was used. The purposive sampling was performed and the sample size was 30 newborn babies. The data were collected by observation. T-test independent was used in analyzing the data. **Result** The result of this study showed that umbilical cord separation time using colostrum as topical treatment was 109.75 hours and using dry gauze was 167.98 hours ($p < 0.03$). In sum, topical treatment using colostrum was more effective in umbilical cord release time. **Discussion** Therefore, a socialization and education about umbilical cord care using colostrum as topical treatment is needed.

Keyword: colostrum, dry gauze, separation time of umbilical cord

Introduction

Umbilical cord infection caused morbidity and mortality in worldwide. Identification of implementation umbilical cord care in clinical practice is needed to prevent the incident of umbilical cord infection (Nehal, 2015). WHO (2013) suggested to follow three roles in umbilical cord care such as taking care umbilical cord in clean and dry condition.

There are several methods which used for umbilical cord care such as using alcohol 70%, povidon iodine 10%, honey, ghee oil (India), and colostrum. However, it is not clear yet, which methods have the shortest separation time of umbilical cord care and prevent an infection (Sodikin, 2009).

Nowadays, dry gauze treatment is used for umbilical cord treatment and this method is become a trend for umbilical cord treatment in Lamongan. Preliminary study was conducted on October 23th 2015. The results revealed that in a month around 10 to 13 babies were born and got dry gauze technique for umbilical cord care. The releasing time of umbilical cord in fifty three percent babies were within 10 days, thirty percent babies were within 7 days, and twelve percent babies were around 12 to 14 days. Based on the results above, we can conclude that dry gauze technique for umbilical cord care need more time compare with existing theory which is around 5 to 7 days (sodikin, 2009).

There are several factors which influence separation time of umbilical cord such as infection in umbilical cord, umbilical cord care technique, dampness of umbilical cord, and environment condition (Dewi, 2010). One of factors which influences accelerate separation time of umbilical cord is umbilical cord care method. The main principal in umbilical cord care to prevent infection and other complications such as prolongation separation time of umbilical cord is keeping umbilical cord in dry and clean condition.

Therefore, a new method is needed to accelerate the releasing time of umbilical cord and prevent the umbilical cord infection in newborn baby. Colostrum contains protein which bonded with protein in umbilical cord and establishes an immune reaction which is apoptosis, fission, and development of cell. At this condition, everything happens as a genetic program. Gen in the cell plays an active role on the apoptosis (Taffazoli M (2008). It is in line with Trotter (2013). He found that breast milk contains antibody which helps baby to against the infection. In umbilical cord care using colostrum, the colostrum applied in the umbilical cord area and does it two times a day after morning and afternoon bath (Sodikin, 2009). Therefore, this study aim was to identify separation time of umbilical cord using colostrum as topical treatment compare with dry gauze in Lamongan, East Java.

METHODS

Quasy Experimental design was used. The sample of this study was newborn babies. Purposive sampling was performed and 30 eligible mothers who have newborn babies were willing to sign the inform consent sheet. Data were collected by observational method for both group (colostrum group and dry gauze group). Umbilical cord care using colostrum was done 2 times a day which is after morning and afternoon bath. This treatment applied starting the first day of the baby until the umbilical cord release. And 1 cc of colostrum was applied in every treatment.

RESULTS

Table 1 Distribution of mothers and newborn babies Characteristics in Lamongan Primary Public Health (2015).

Variables	Colostrum		Dry Gauze	
	n	%	n	%
Ages				
20-35 years old	13	86.7	13	86.7
>35 years old	2	13.3	2	13.3
Mother education background				
Senior High School	9	60	15	100
Undergraduate	6	40	0	0
Parity				
Primiparous	8	53.3	9	60
Multiparous	7	46.7	6	40
Gestation				
38-42 mgg	15	100	15	100
Mean of Birth weight (gram,±SD)	3213		3106	
	±208		±17	
			0	

Majority mothers were 20-35 years old (86.7%), Senior high school (60% and 100%), primiparous (53.3% and 60%). All of newborn babies had aterm history and the mean of birth weight for colostrum group and dry gauze groups were 3213gram,SD± 208 gram and 3106 gram, SD±170 (Table 1).

Based on the diagram 1, separation time of umbilical cord in intervention group is faster than the control group. It was proved by statistic result as well.

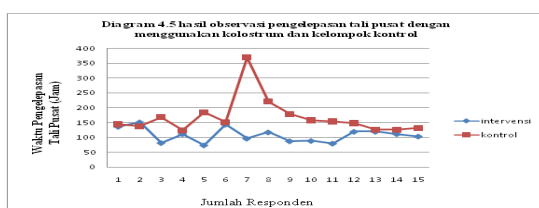


Diagram 1 the result of releasing time of umbilical cord

Table 2 Distribution of separation time of umbilical cord in Lamongan Primary Public Health (2015)

Groups	Separation Time of Umbilical Cord (hour)				Expl anati on
	N	Mea n	SD	P	
Colostru m	15	109.75	23.39	.03	Efekt if
Dry gauze	15	167.98	61.67		

Note: *t- test Independent*

Based on the table 2, it showed that the mean of separation time of umbilical cord in the colostrum group was 109.75 hours (4 and half days). Thus, the mean of separation time in the dry gauze group 167.98 hours (7 days). The statistic test result using t-Independent test showed phi value 0.03 ($p < 0.05$). In sum, the statistic test result showed that there was difference in both method and the separation time of umbilical cord in colostrum group was shorter than dry gauze group.

Discussion

Based on the table 2, we can conclude that the mean of umbilical cord separation time using colostrum as topical treatment in newborn baby was 109.75 hours or around 4 and half days. It is shorter than the mean of umbilical cord separation time using dry gauze technique which is 167.98 or around 7 days. Moreover, the statistic test result showed that the phi value was 0.03. This value is lower than the Alfa level (0.05). Therefore, the first hypothesis was accepted. Colostrum is more effective to accelerate the separation time of umbilical cord compare with dry gauze.

Vural and Kisa (2006) reported that, Breast milk may accelerate the complicated process of umbilical cord separation through polymorphonuclear leukocytes present at umbilical cord, photolytic enzymes. Umbilical cord separation is a complicated process and histological studies have reported polymorphonuclear infiltration between the umbilical cord stump and the abdominal wall. Human milk accelerates umbilical cord separation process because it has polymorphonuclear and photolytic enzymes. In

the other hand Taffazoli M (2008) Colostrum is more effective to accelerate the separation time of umbilical cord compare with dry gauze. It is approved that colostrum contains protein which bonded with protein in umbilical cord and establishes an immune reaction which is apoptosis, fission, and development of cell. At this condition, everything happens as a genetic program. Gen in the cell plays an active role on the apoptosis.. Sofiana, Ika (2011) in her studied reported that Umbilical cord care using breast milk needs around 127 hours for releasing time of umbilical cord and the fastest time is 54 hours. In dry open care technique, the separation time of umbilical cord was 192.3 hours and the fastest time was 113 hours. In a similar randomized controlled trial study by Azar (2012) researchers showed that the cord separation time in triple dye group was significantly longer than in alcohol group and dry cord care group, while there was no significant statistical difference between alcohol group and dry cord care group. Topical application of human milk on the remaining part of the cord reduces the cord separation time and it can be used as an easy, cheap and non invasive way for cord care.

On the oher hand Nehal (2015) reported that the duration of the umbilical cord stump separation time in breast milk group is shorter than in the dry cord group by about two days. In spit the umbilical cords were detached in both groups within the normal period between (5-15 days following the birth) as documented in literatures. Breast milk help to accelerate the separation time of umbilical cord. It is due to the breast milk contains which are polymorphonuclear leukocytes, proteolytic enzymes and other immunology agents (Mousa 2006). Ebtsam (2012) said that colostrum which is produced by mothers in the first few days after gave birth is rich with Immunoglobulin G. Colostrum also contains white blood cell and has a special substance which can against infectious agents compare with breast milk.

Based on the our data in the first day babies got umbilical cord treatment using colostrum after morning bathing, we found that the color of umbilical cord was changed. One third of umbilical cord color was changed become black. In the next day, half of umbilical cord was changed become black. In the Third day, the umbilical cord was become atrophy and all of part in the umbilical cord were become

black, showed starting dryness in the tip of umbilical cord. In the fourth days, the umbilical cord showed dryness in all of umbilical cord part and will separated from the baby's womb.

Those were difference with dry gauze technique. The mean of umbilical cord separation time using dry gauze technique was 167.98 hours or 7 days. Umbilical cord care using dry gauze was applied twice a day. The umbilical cord was covered using dry gauze in every after morning and afternoon bathing. The first day of newborn care that got umbilical cord using dry gauze didn't show any difference color. In the second day, it showed one third of the color umbilical cord part become black. In the next day, the half of the color of umbilical cord part becomes black, but we didn't find the sign of umbilical cord atrophy. In the fourth day, umbilical cord showed the sign of atrophy and almost all of umbilical cord part in the black color. In the fifth day, all of umbilical cord part was getting black and showed dryness in the tip of umbilical cord. In the sixth day, all of umbilical cord part showed the dryness, even the umbilical cord part which near with womb. However, it didn't show any sign of umbilical cord separated with womb. In the last day, the umbilical cord separated with the womb. Those conditions happed because the dry gauze technique just has effect dry in umbilical cord. Dry gauze technique is easily contaminated by bacteria and we can say that dry gauze didn't directly prevent incident of umbilical cord infection. Another condition, the dry gauze technique cannot accelerate the separation time of umbilical cord (Walsh, 2007). Prolongation of umbilical cord separation time can enhance the risk of neonates' infection. Neonates' infection happens because of bacteria come in to the neonates' body through umbilical cord which doesn't separation yet. Mushy umbilical cord will increase the development of bacteria and virus. This condition will be enhance the incident of neonates mortality (Sodikin, 2009).

CONCLUSION

Umbilical cord care using colostrum is more effective to accelerate the separation time of umbilical cord compare with umbilical cord care using dry gauze technique. The separation time of umbilical cord which treats using colostrum as topical treatment is shorter than using dry gauze technique.

Based on the study result, hopefully every institution will provide health education and socialization related to umbilical cord care using colostrum as topical treatment. In the end, the society can apply this technique in public health service as well as in community setting.

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EFFECT OF PEER GROUP SUPPORT TO DECREASE THE LEVEL OF STRESS IN PATIENTS WITH CERVICAL CANCER BEFORE FACING CHEMOTHERAPY IN MERAK ROOM AT DR. SOETOMO HOSPITAL SURABAYA

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ABSTRACT

Introduction: stress is actually a form of response to someone though physically and mentally to a perceived change in the environment that felt disturbing and cause him danger. Heavy or not, it depends on the level of stress coping mechanisms that owned by each patient. **Method:** This study used an experimental research design with a type of design *Pre One group pre test-post test design*. The population in this study was all patients Ca. Cervix before facing chemotherapy in Merak room at Dr. Soetomo hospital Surabaya. The sampling method was the consecutive sampling techniques and the sample used by 9 respondents then statistically analyzed with the Wilcoxon Signed Ranked Test with $p = 0.000$ level of significance $\alpha \leq 0.05$. **Results:** Results obtained from a number of 9 respondents prior to the *Peer Group Support* were there 11.11% patients had moderate levels of stress 89% patients had severe stress levels. In the statistical analysis Wilcoxon test showed $p = 0.020$ with $\alpha < 0.05$. This showed a significant influence on *Peer Group Support* to the decrease stress level of cervical cancer patients before chemotherapy. **Discussion:** Based on the results of the data analysis, it could be concluded that the *Peer Group Support* was influential in decreasing the stress levels in patients before facing chemotherapy. It was necessary for *Peer Group Support* to resolve the problem before facing stress in patients with chemotherapy.

Keywords: *Peer Group Support, Stress, patients with cervical cancer, chemotherapy*

INTRODUCTION

Cancer is a ferocious neoplasm disease that had a very broad and complex spectrum. This disease is ranging from the most benign of malignant neoplasm to the most ferocious of malignant neoplasm. Almost no cancer could be cured spontaneously and if the cancer was left to grow, sooner or later it would lead to death (Rasjidi, 2009). One of them is cervical cancer, cervical cancer is cancer that occurred in the uterine cervix, it is an area in female reproductive organ which is the entrance towards the uterus located between the womb (uterus) and burrow of copulations (Farid Aziz, 2006). Cervical cancer develops gradually and progressively, however this disease can be prevented if it is recognized earlier but mostly the patients of cervical cancer are coming for treatment in advanced

stages condition so that the treatment success rate is very low. This causes cervical cancer is commonly seen by the public as the disease which is not curable and ended with death along with terrible suffering. Such people's assumption is also able to cause stress to the sufferer (Soedoko, 2007). Cervical cancer is a disease that can influence every aspect of human life, either physiological, psychological, social or spiritual. Stress in patients diagnosed with cervical cancer may increase due to the disruption of the physiological, psychological, and social aspects that were getting worse (Hartono 2001). One of the treatments of cervical cancer stage IIB to IIIA was chemotherapy. On the contrary, chemotherapy is an action that had serious implications for women, for instance they should stop having

sex with her husband and the side effects of chemotherapy itself are namely baldness, nausea, vomiting and so forth. This led to stress among women who would undergo chemotherapy treatment (Soedoto 2001). Therefore, it needs serious handling against the stress experienced by cervical cancer patients so that the treatment which is attempted becomes more optimal, non-medical treatment is the main solution to overcome the stress of cervical cancer patients.

Cervical cancer was the cancer with the second highest number in the whole world, with 500.000 new cases and 250.000 deaths each year. Every two minutes, a woman around the world died due to cervical cancer (WHO 2010). Cervical cancer still remained one of the major health problems of women in Indonesia where there were 7.566 deaths from cervical cancer by the Case Fatality Rate (CFR) 12,8% (Parkin 2002). In 2009, the prevalence of cervical cancer in Indonesia reached 90-100 cases per 100.000 of population, which was found 200.000 new cases each year (Ward 2009). Indonesian women who were at risk of cervical cancer at the age of 15-61 years had reached 58 million people. The journey of cervical cancer from the first time infected until became the cancer took about 10-15 years, thus the majority of cervical cancer patients were over 40 years old. Most cases of incidence and mortality from cervical cancer occurred in the age group 45-54 years with Age Specific Death Rate (ASDR) 29,05 per 100.000 of women (Parkin 2002). There were about 70% to 80% of patients were detected already in the stage IIIB upward (Hartono 2005). Based on the data from Hospital of Dr. Soetomo Surabaya, cervical cancer patients had increased. In 2010 at the Merak room, there were 442 people and in 2011, there were 561 patients.

Stress could influence the body's immunity, *Steven E. Keller*, et al (1999) in various studies found a significant association of psychosocial stress, depression, immunity and physical health. Their research confirmed previous researchers such as Selye (1976),

Glaser, et al (1987), Solomon (1993), in which stated that psychosocial stress would lead to psychobiological stress that decreased the body's immunity. When the body's immune is declining, the people would vulnerable to ill both physically and mentally, and eventually disrupt treatment (Dadang Hawari 2001). An extremely stress occur in 25% of patients with cervical cancer, this would lead to more weakening of the function of organs, disrupt treatment and eventually make the suffering to be more severe for patients (Soedoko, 2007). In a previous study entitled overview of the physical and psychological clients with cervical cancer at the Regional General Hospital of Dr. Moewardi Surakarta (Siluh 2010) show that patients diagnosed with cervical cancer would experience psychological problems and show maladaptive responses such as stress, anxiety and depression. Stressor is the main stimulus occurrence of stress. Physiologically, someone who get stressors such as physical illnesses, stressors would be captured through the five senses, through the nervous system senses and then forwarded to the central nervous system of the brain, namely the nerves of the brain called the limbic system, through nerve transmission (neuro transmitter / nerve conductor signal). Afterwards, through the autonomic nervous system (sympathetic / parasympathetic), stimulus or psychosocial stimuli would be forwarded to the hormonal glands (endocrine) which is the body's immune system and organs of the body which it supplied.

With such description, the nurse is required to provide nursing care models holistically namely biopsychospiritual that is not focused solely on the disease. Calista Roy also proposed one theory of the application of holistic nursing care through adaptation theory. Roy described that human beings are biopsychosocial as one unified whole. In fulfilling their needs, people always dealt with a variety of complex problems, so they need to adapt. The use of coping or self-defense mechanism is responding to perform the role and function optimally in order to maintain self integrity of the range state of healthy and

sickness from the surrounding environment (Roy, 1991). *Peer Group Support* therapy provided a new method of holistic treatment of cervical cancer patients who experience stress subsequently it could strengthen the coping mechanisms of the sufferer, it is expected that the patient is able to adapt to the conditions. *Peer Group Support* is the management of psychosocial therapy or social support in fellow sufferers which is applied in order to improve the coping mechanisms, hence the stress obtained is lowered and would be accompanied by the sighting of the adaptive response of the patient (Dadalos, 2008).

METHOD

The Pre experimental action research with One group pretest-posttest design was used in this study. The sampling in this research used consecutive sampling. Data were analyzed using Wilcoxon Signed ranked with scale ordinal value $\alpha = 0.05$. When $\rho = 0.000$, $<\alpha = 0.05$. H_1 was an influence of Peer Group Support to decrease stress in patients with cervical cancer chemotherapy. Overall statistical data processing was computerized by using the Software Product and Service Solutions (SPSS) version 16.0.

RESULT

Based on the observation of cervical cancer patients stress level prior to Peer Group Support, of the 9 (nine) patients, 89% patients experienced severe stress level, 11.1% patient experienced moderate stress level, and 0% patients experienced mild stress level. Meanwhile the observation of stress levels in patients after Peer Group Support was conducted, of the 9 (nine) patients, there was 1 (one) patient (11.1%) experienced mild stress levels, 6 (six) patients (67%) experienced moderate stress levels, and 2 (two) patients (22.22%) experienced severe stress level. In the statistical analysis of Wilcoxon test, it showed that $\rho = 0.020$ with $\alpha < 0.05$ which meant that the research was considered successful if $\alpha < 0.05$ and 0.020 indicated that there was an influence of Peer Group Support to decrease stress levels of cervical cancer patients before chemotherapy.

Table 1 Stress Level Observations of Cervical Cancer Patients Before and After Peer Group Support was conducted.

Stress Level	Before	After
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Classification		
Mild	0	1
Moderate	1	6
Severe	8	2
Total	9	9

Wilcoxon Sign Rank Test Value $p = 0.020$

This was confirmed by the results in Table 5.1, it showed that 8 (eight) patients (89%) experienced severe stress level and 1 (one) patient (11.1%) experienced moderate stress level, before being given Peer Group Support intervention. After 3 times of an intervention, there were changes in stress levels, patients who had “severe” stress level decreased of 8 (89%) to 2 (22.2%).

DISCUSSION

According to Dadang Hawari (2001), one of the therapies that could strengthen the defense mechanisms / coping so that individuals could respond adaptively or adapt to the changes that occurred in one's life due to psychosocial stressors was psychosocial therapy. Peer Group Support was a social support provided by patients to patients who experienced emotional difficulties to someone who experienced the same difficulties by listening to complaints and sharing experiences that they had experienced regularly (Wikipedia. Org, 2010).

According to Sarafino (2006), coping was the process by which an individual made an effort to manage (*management*) the situation that was perceived as gaps between effort (demands) and abilities (resources) that was considered as the cause of a stressful situation. The efforts of coping varied widely and it was not always able to create a solution of a problem that led to stress situation. Individuals made the process of coping against stress through the transaction process with the environment, behaviorally and cognitively.

Callista Roy's adaptation theory viewed clients as an adaptation system. The underlying assumption was human used defense mechanisms / coping to address the biopsychosocial changes. Human beings were holistic creature that had adaptive system (Marriner-Tomery, 1994).

Cervical cancer was a disease that could influence every aspect of human life, whether physiological, psychological, social

and spiritual. According to Dadang Hawari, cervical cancer was one of the psychosocial stressor. High or low levels of stress of a person were strongly influenced by its coping mechanisms. Roy explained how important the use of coping or self-defense mechanism to maintain the integrity of the range state of healthy and sickness both physically and mentally from the surrounding environment. Coping mechanisms could work well if the regulator components and subsystems of cognator that was included in Roy's adaptation model proceed properly through appropriate input.

Peer Group Support therapy provided a new method of holistic treatment of cervical cancer patients who experienced stress so that it could strengthen the coping mechanisms on the sufferers. *Peer Group Support* would serve as the input of the regulator subsystem and the cognator. *Peer Group Support* dynamics would more emphasize on how the group members are able to share the problems that covered biological, psychosocial, and patients' religious, hear each other, share difficulties and jointly find solutions to the various problems experienced by the members of the group by focusing on how to overcome the problem of stress.

Solving patients' biological problems would be good input to the regulator subsystem since many physiological processes that could be considered as behavior of subsystem regulator.

Solving psychosocial problems patients would be good input for cognator subsystem because the process of this component was related to the function of the brain in processing information, assessment and emotions. Afterwards, it was expected to strengthen the perception through the imitation process and corroboration, and it would be easy if it was acquired in a social environment of fellow sufferers through a process of social learning.

Of both components of the subsystem, if it proceeded correctly, it would produce output that was able to strengthen the coping mechanism so that the physical, psychological, social, was fulfilled by means of a positive perception obtained through the process of strengthening the coping mechanisms. This would have an impact on the actions or the adaptive response resulting in decreased levels of stress.

Moreover, based on the results of the study, the stress levels before and after being given *Peer Group Support* intervention, it showed differences. The patients experienced a decrease in stress levels after being given *Peer Group Support* intervention although one patient to other patients had different levels of decrease. This was because researchers noticed *Peer Group Support* action procedures and acceptance shown by the patients when in an activity

CONCLUSION

Based on the research purposes and discussion conducted by researchers, it can be concluded as follows: stress level prior to *Peer Group Support* for patients was mostly severe, stress level after conducting *Peer Group Support* for patients was mostly moderate, there was an influence of *Peer Group Support* towards the decrease in stress levels.

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THE PREVALENCE AND SOCIAL SUPPORT POSTPARTUM DEPRESSION MOTHER IN BANYUMAS

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ABSTRACT

Introduction: Postpartum depression is a mental disorder can happen after mother deliver her baby. The effects of postpartum depression can influence both infant growth and the mother's relationship with her husband. The prevalence in Banyumas need further information to avoid conditions related to postpartum depression. Social support also one of predictor postpartum depression and need to explore it. The purpose of this study is to examine the prevalence and social support postpartum depression in Indonesia. **Methods:** A descriptive correlational study was conducted from February to March 2015. The 138 participants were recruited from the Public Health Sokaraja II in the Banyumas area, Central Java, Indonesia. The participants were collected from postnatal visits to public health facilities and home visits using convenience sampling. This study used 3 instruments, namely the Edinburgh Postnatal Depression Scale (EPDS) and Interpersonal Support Evaluation List (ISEL) which included demographic data. **Results:** Prevalence PPD in Banyumas 25 person This study found postpartum key helpers in social support consisted of; husband, mother, mother in-law, and also brother and sister who experienced significant postpartum depression symptoms ($\chi^2 = 15.995, p = 0.001$). Social support was also a significant difference between no depression and depression groups an ISEL mean of 3.676 ($t = 3.336, df = 136$). **Discussion:** The prevalence PPD in Banyumas already found and social support was also involved prevalently with postpartum depression. Further research on intervention based on the culture of an Indonesian setting is needed to improve nurses' knowledge.

Key Words: *Prevalence, Postpartum depression, Social support*

EFFECT OF AEROBIC EXERCISE ON MENSTRUAL PAIN

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ABSTRACT

Introduction:For women, menstruation is a separate ordeal that should be experienced by every month. According to the study, most women have experienced disruption in the menstrual process. This study aim to investigate the effect of aerobic exercise on menstrual pain.**Method:**This study was aquasy-experimental with one group pre-post test design with observation. The population in this study were all students of the first semester are experiencing dysmenorrhea. The sample in this study are some students who have Dysmenorrhea the first half of 20 respondents using sampling techniques "purposive sampling". The independent variables are aerobics and the dependent variable is the intensity of dysmenorrhea. The data processing is done with the editing, coding, data entry, cleaning the data. Data were analyzed using Wilcoxon test with a significance (α) = 0.05. This study carried out on the course for DIII of nursing at the University of Nahdlatul Ulama Surabaya.**Result:**Based on the research that 85% of respondents experiencing severe menstrual pain intensity (scale 7-9) before the given intervention. After a given intervention is by doing aerobic exercise 2-3 times each week in getting 90% decrease in their pain is of heavy into moderate (scale 4-6). Based on the analysis using the wilcoxon test, obtained the value $\rho = 0,000$, meaning there is significant relationship between aerobic exercise with a reduction in the intensity of menstrual pain.**Conclusion:** Patients with painful menstruation (Dysmenorrhea) must regularly perform aerobic exercises so painful menstruation (Dysmenorrhea) can be resolved.

Keywords: Painful, Dysmenorrhea, aerobic

INTRODUCTION

Adolescence is a period marked by rapid growth and development of the physical, emotional, cognitive and social. Rapid changes of the physical, emotional, cognitive and social. Physical changes that occur in men as hair growth in the armpits and genitals, grew a mustache and Adam's apple, sounds swell, increased chest areas, wet dreams (first ejaculation), increase the size of the penis and testicles. While there is a change in women such as breast and hips enlarged, the body grow taller, growing hair in the armpits and genitals, as well as menstruation (Santrock, 2003).

One sign of puberty is the occurrence of menstruation. Menstruation is the periodic discharge from the vagina during the reproductive age. A normal menstrual consisting of blood, secretions and the lining of the uterus / womb removed (Ramaiah, 2006). For women, menstruation is a separate ordeal that should be experienced by every month. According to the study, more than 50 percent

of women have experienced disruption in the menstrual process. One of the disturbances in the menstrual process is painful menstruation (Dysmenorrhea). Bobak (2004) mentions that painful menstruation (Dysmenorrhea) is not a disease, but symptoms caused by abnormalities in the pelvic cavity and debilitating female and often requiring patients to rest and leave their work for hours due to painful menstruation (Dysmenorrhea).

The prevalence of menstrual pain (Dysmenorrhea) in several studies showed a high frequency. In a review systemik WHO, the average incidence of menstrual pain (Dysmenorrhea) in young women between 16.8 to 81%. Based on the research results Eka Devi in Ponorogo in 2013 in getting the results that out of 49 respondents who experienced painful menstruation (Dysmenorrhea) and cause the disruption of daily activities at 30.6%. Initial studies conducted by researchers at 82 semester student 1 Prodi DIII of Nursing Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya, show the data that gained 40 experience painful menstruation (Dysmenorrhea) and while it is not experience

menstrual pain (Dysmenorrhea) were 42 female students.

Painful menstruation (Dysmenorrhea) is the characteristic pain that occurs before or during menstruation, occurs on the first day up to several days during menstruation. This is one of many gynecological problems, affecting more than 50% of women and lead to the inability of the activity for 1-3 days each month on the day the woman. Painful menstruation (Dysmenorrhea) there are two forms of primary and secondary menstrual pain. Painful menstruation (Dysmenorrhea) primer usually arises in the first or second day of menstruation. The pain is colic or cramps and felt in the lower abdomen. Several factors are associated with painful menstruation (Dysmenorrhea) of primary uterine prostaglandins are high, and their emotional or psychological factors. Unclear how prostaglandins can cause painful menstruation (Dysmenorrhea) but it is known that women with menstrual pain (Dysmenorrhea) has a prostaglandin that is four times higher than women without menstrual pain (Dysmenorrhea) (Siswandi, 2007).

Impact painful menstruation (Dysmenorrhea) is one of the problems in the lives of young women, forcing them to use various methods to prevent menstrual pain (Dysmenorrhea). Handling painful menstruation (Dysmenorrhea) is divided into two categories: pharmacological and non pharmacological. Pharmacologically painful menstruation (Dysmenorrhea) can be done by providing relaxation techniques, giving a warm compress and carry out physical exercise or sport. The exercises are mild exercise is highly recommended to reduce menstrual pain (Dysmenorrhea) because during exercise the brain and spinal alignment will produce endorphin hormone that serves as a natural tranquilizer, causing a sense of comfort (Harry, 2005). Ramaiah (2006) mentioned that, one very effective way to prevent painful menstruation (Dysmenorrhea) is doing sports activities. Some exercises can improve blood supply to the reproductive organs so that the circulation of blood. Regular exercise such as walking, jogging, running, biking, swimming or aerobics can improve the reproductive health of the circulation of blood. Exercise at least done three to four times a week, especially during the second half of the menstrual cycle. Research from Ramaiah

(2006) showed that women who exercise regularly can increase the secretion of hormones and their utilization, especially estrogen. Exercise is important for young women who suffer from menstrual pain (Dysmenorrhea) for moderate and regular exercise increases the release of beta-endorphins (natural pain relievers) into the bloodstream so it can reduce menstrual pain (Dysmenorrhea).

Based on the phenomenon that researchers want to conduct research on "Effects of Aerobic Gymnastics Decline Against Menstrual Pain Intensity (Dysmenorrhea primer) on the Student Semester 1 Prodi DIII of Nursing Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya"

METHOD

This study uses a Quasi Experiment, which aims to investigate the effect of exercise to decrease menstrual pain intensity in the first semester student Prodi DIII of Nursing Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya. This type of approach used in this study is the approach of pre-post test in one group (one-group pre-post test design).

The population in this study is a student of the first semester Prodi DIII of Nursing Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya who experience dysmenorrhea and numbered 40, Sampling using Non Probability Sampling technique with purposive sampling. Sample used 20 respondents with a consideration when a population of less than 100 should be in cuplik 50% of the population and when the population of several hundred were taken 25 to 30 (Saryono, 2011). with the sample criteria as follows:

- a. Student who experience menstrual pain
- b. Students who are willing to cooperative
- c. Students who are willing to study

The variables in this study include independent variables, aerobics and the dependent variable is the intensity of pain during menstruation (dysmenorrhea Primary), using an instrument observation sheet which is a guide in assessing the indicators of aspects observed systematically and it was arranged by category. Shape observation sheet (observation) in question is shaped checklist list with members sign "□" in the assessment

categories. This assessment categories is indicative picture of the situation regarding the object being observed (examined), for example: if the observed indicators appear or seem, then categorized as "no", if it does not appear or do not appear then categorized "no". The object or goal Prodi DIII Nursing student observed. Research variables observed is menstrual pain scale before and after doing gymnastics. Pain scale to assess pain using a pain scale of 0 - 10 scale 0 is no pain, 1-3 mild pain, 4-6 moderate pain, severe pain 7-9 and 10 include uncontrolled pain.

Data have been collected do coding or corrected through observation sheets, and then analyzed decreased levels of pain during menstruation (dysmenorrhea) before (pre) and after (post) doing aerobics, analysis of data using Wilcoxon test with a significance (α) = 0.05

RESULTS AND DISCUSSION

Based on the results of the study showed that 50% of respondents aged 20 years. The peak incidence of pain during this Dysmenorrhea occurs in late adolescence and early 20s. The incidence of pain during this Dysmenorrhea declines with increasing age and increasing birth (Anuoro, 2008).

Based on the level karakteristik menstrual pain (primary Dysmenorrhea) almost entirely 85% experienced severe pain (scale 7-9). Actions performed when experiencing menstrual pain is based on the results, 50% of respondents reduce menstrual pain by taking medicine. By taking medicine pain arising expected to decline. The type of exercise that favored the respondents 50% of respondents prefer aerobic exercise when compared to other sports such as jogging, running and more.

Respondents in this study 70% of family and social support. When experiencing difficult times, it is in need of support from the people around, so it can subtracts stress caused due to menstrual pain (dysmenorrhea). By automatically decreasing stress can also lower levels of prostaglandins and pain will decrease.

Based on the research after the aerobic exercise 2-3 times a week every decrease menstrual pain and based on the analysis using the Wilcoxon test showed $p = 0.000$, which means there is influence of exercise (aerobic) to decrease the intensity of pain dysmenorrhea primer.

Gymnastics is one of the most efficient ways to reduce pain during Dysmenorrhea. Dysmenorrhea defined by Stenchever (2002) in Chudnoff (2005) as the sensation of pain like cramps in the lower abdomen often in conjunction with other symptoms such as sweating, tachycardia, headache, nausea, vomiting, diarrhea and tremors. Gymnastics is performed to reduce pain Dysmenorrhea is included into the general gymnastics which gerakkannya accordance with the characteristics of general gymnastics and general characteristics of health exercises described by Griwijoyo (1995) and Sumaryanti (2006).

At respondents who do aerobic senan can increase the levels of β endorphin. When someone does gymnastics, then β endorphin going out and captured by receptors in the hypothalamus and the limbic system which serves to regulate emotions. Increased β endorphin shown to be associated closely with decreased pain, increased memory, improve appetite, sexual performance, blood pressure and respiration. So sports or exercise will be effective in reducing pain problems, especially dysmenorrheal (Harry in soeparto, 2011).

As for the physical exercise that can be done with aerobic one of them has the benefit yitu help cardiovascular health through blood pressure, lipids, and reactivity to stress (Surafino, 2008).

Furthermore, according to Syatria (2006) exercise is an aerobic activity which is beneficial to improve and maintain the health and durability of pulmonary, circulatory, muscle, muscular endurance, flexibility and cardiorespiratory endurance. Effect of exercise will provide physiological changes occur in almost every system of the body. Physical exercise will provide a good influence for the various systems that work in the body, one of which is the cardiovascular system, where the physical exercise properly and regularly will occur efficiency of the heart. Efficiency of the heart or the heart's ability to increase in accordance with the changes that occur. It may be an alteration in heart rate, stroke volume and cardiac output. With melakukn physical exercise experienced a widening of the blood vessels and relaxation. Over time, exercising can relaxes blood vessels. One factor is the factor Dysmenorrhea blockage in the cervix. As a result, when the menstrual blood will come out required a strong contraction of the

uterus to remove the blood, causing pain during menstruation so that it can be concluded that the exercise fiik form of aerobic exercise can reduce dysmenorhea because one of them can help in contracting the blood vessels in the uterus becomes easier without contractions strong, in which the strong contraction can cause pain.

Based on the results of the research showed that respondents experiencing severe menstrual pain intensity before done or given intervention. After a given intervention is to melakukn aerobic exercise 2-3 times each week in getting their pain was reduced, namely from heavy to medium and some even reduced to mild. This is in accordance with the opinion of Laili (2012) teens who regularly exercise melukan decreased dysmenorhea. The results are consistent with research Suprpto (20110 shows that gymnastics dysmenorhea effective for reducing dysmenorhea in adolescents. This study proves that teens who do senm aerobic decreased dysmenorhea. This is because the body will be able to increase the levels of β endorphin four to five times in blood. so more and more to do gymnastics or sports, the higher the levels of β endorphin. Increased β endorphin shown to be associated closely with decreased pain, increased memory, improve appetite, sexual performance, blood pressure and respiration. so sports or exercise will be effective in reducing the problem of pain, especially dysmenorhea.

CONCLUSION

First, the intensity of menstrual pain (primary Dysmenorrhoea) in the first semester student Prodi DIII Nursing Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya before doing aerobics mostly mengalmi severe pain.

Second, the intensity of menstrual pain (primary Dysmenorrhoea) in the first semester student Prodi DIII Nursing Faculty of Nursing and Midwifery University of Nahdlatul Ulama Surabaya after doing aerobics mostly experienced moderate pain.

Thirdly, There is the influence of aerobic exercise with a reduction in menstrual pain intensity (primary Dysmenorrhoea) in the first semester Prodi DIII student nursing and

midwifery nursing faculty University of Nahdlatul Ulama Surabaya.

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EFFECT OF GIVING “KATUK” LEAVES TOWARDS THE FLUENCY OF ASI PRODUCTION ON BREASTFEEDING MOTHER IN PETERONGAN DISTRICT HEALTH JOMBANG REGENCY

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ABSTRACT

Introduction: Researchers are interested to know the effect of katuk leaf in breastfeeding mothers on lactation in the Peterongan District Health. Because katuk leaves has known as a good food to stimulate the ASI Production to help every mother in giving exclusively breastfeed since long time ago. This study aims to determine the effect of katuk leaves towards the fluency of ASI production on breastfeeding mother in Peterongan District Health Jombang Regency. **Method:** this study uses a Pre-experimental design approach one group pre-test - Post-test. Population used in this study are postpartum mother in the working area of District Health Peterongan in March 2014 for 2 weeks early, as many as 15 for postpartum mother. Samples taken from the entire population. Sampling decision by accidental sampling technique. The independent variables: Giving Leaves katuk in breastfeeding mother and the dependent variable: the fluency of milk production. Data were collected with a checklist, and analyzed using T test. **Results:** Results before treatment known 8 respondents (53.3%) has less fluent ASI Production, 4 of respondents (26.6%) fluent, and 3 respondents (20%) has very fluent ASI Production. And after treatment known 3 respondents (20%) has less fluent ASI Production, 2 respondents (13.3%) Fluent, and 10 respondents (66.6%) very fluent ASI Production. **Conclusions:** The results of statistical tests in this study are there are significant effect of giving katuk leaves toward the fluency of ASI Production on breastfeeding mother.

Keywords: Giving Leaves katuk, Smooth breast milk, breast-feeding mothers

INTRODUCTION

Since long time ago katuk leaf has been known as a good food to increase the production of breast milk (ASI). The leaves are consumed as fresh vegetables or boiled as a juice. Katuk leaves are known as *laktogogum* or stimulate milk production and *antipyretics*. (Poster, 2012: 293) . Nowadays katuk leaves already in production as preparations fitofarmaka which believed to make fluency milk production. In 2000, there have been 10 kinds of fluency milk production that contain of katuk leaves in Indonesia. Even katuk leaf extract has been used as an additive substance in food products at designated for breastfeeding mothers. Development of research on leaf katuk to be done continually, especially to eliminate the negative effects that may arise. (Elshabrina, 2013: 136)

Breast milk is the most great gift from mother to infant that secreted by both the mammary

gland mother in the form of a natural food or milk the best nutrition and high energy that is easy to digest and contains balanced nutrition and perfect for your baby's development which available at all times, ready serve at room temperature and free from contamination. (Wiji, 2013: 4). However, not all mothers want to breastfeed for various reasons. For example: fear of fat, busy, sagging breasts and so on. On the other hand, there are also mothers who want to breastfeed their babies but having problems. Usually the milk does not come out fluently or substandard production. (Wiji, 2013: 60)

Based on preliminary study in Peterongan health center on 19 november 2013 found that coverage of exclusive breastfeeding mothers in January until August 2013 is (69.29%), while the scope of mothers who did not breastfeed (30.71%), while coverage postpartum mother in January to October 2013 by (79.8%). (Puskesmas Peterongan. 2013). Efforts in increasing the milk production can be done by

breast care early and regularly, improve breastfeeding techniques, or by consuming foods that can increase milk production. One best way is by Giving Therapeutic Katuk Leaves, Because this therapy katuk leaves has known can increase milk production for every mothers who have not fluent milk production enough but want to give their babies exclusively breastfed. (Wiji, 2013: 107-108). From this background, researchers are interested to know the effect of katuk leaf in breastfeeding mothers on lactation in the Peterongan District Health. Because katuk leaves has known as a good food to stimulate the ASI Production to help every mother in giving exclusively breastfeed since long time ago (Wiji, 2013: 107)

RESEARCH METHOD

This study design using this type of experimental research, using research designs Pre-Experimental Design (non design). This research approach One Group Pre-test - Post test design. In observations made in this design as much as 2 times that before the experiment and after the experiment. Observations before the experiment was conducted to determine lactation before giving katuk leaves therapy and second observation was conducted to determine lactation after giving katuk leaves. The samples are postpartum mother in Peterongan Health District for 2 weeks early, as many as 15 postpartum mothers. This study using nonprobability sampling with accidental sampling technique.

RESEARCH RESULT

Results of research conducted on 1 March to 20 March 2014 in Peterongan Health District Jombang Regency 2014. General and specific data for lactation breastfeeding before giving leaves katuk, lactation breastfeeding mothers after giving katuk leaves, and the effect of katuk leaves to lactation in breastfeeding mothers.

Frequency Distribution Characteristics of Breastfeeding by age in Peterongan Health District Jombang Regency.

Explaining that the majority of 8 respondents

(53.3%) aged 20-30 years from 15 respondents.

Frequency Distribution Characteristics of Breastfeeding According to Education in Peterongan Health District Jombang Regency.

Education level of respondents indicate that most of the 10 respondents (66.7%) of the 15 respondents had high education.

Breastfeeding Frequency Distribution Characteristics Based on Number of Birth in Peterongan Health District Jombang Regency.

Data showed that the majority of respondents Breastfeeding mothers as much as 53.3% primiparous and multiparous lactating mothers fraction as much as 46.6%.

The frequency distribution by lactation before treatment in nursing mothers in Peterongan Health District Jombang Regency.

Obtained data on lactation in breastfeeding mothers prior to treatment is obtained 8 respondents (53.3%) with non-current fluent milk prroduction (ASI) of 15 respondents.

Data that obtained from Pre – Test.
Table 4.4 Data that obtained from Pre – Test conducted to the Fluency of Milk Production (ASI).

N R	Number of List									To tal Sc ore
	1	2	3	4	5	6	7	8	9	
1	1	1	1	1	0	1	1	1	1	8
2	1	1	1	0	0	1	0	1	1	6
3	0	1	0	0	0	0	0	0	0	1
4	1	1	1	0	0	1	1	1	1	7
5	0	1	0	0	0	0	0	0	1	2
6	0	1	1	0	0	0	1	1	0	4
7	1	1	1	1	0	1	1	1	1	8
8	0	1	0	0	0	0	0	0	1	2
9	0	1	0	0	0	0	0	0	1	2
10	1	1	1	0	0	1	0	1	1	6
11	1	1	1	0	0	1	0	1	1	6
12	0	1	1	0	0	0	0	0	1	3
13	0	1	0	0	0	0	0	0	1	2
14	1	1	0	0	0	0	0	0	1	3
15	0	1	0	0	0	0	0	1	0	2
Avarage										4.1

Source : Checklist 2014

The frequency distribution based on fluency milk production on breastfeeding mother after treatment in Peterongan Health District Jombang Regency 2014.

Data based on fluency milk production on breastfeeding mothers after treatment obtained 10 respondents (66.6%) with ASI very fluent from 15 respondents. Having performed statistical tests obtained by $p(0.000) < \alpha = 0.05$ $df 14$, a 5%, $t_{\text{calculate}} (5671) > t_{\text{table}} (2.145)$ then H_1 accepted which means that there is the effect of Katuk leaf against to fluency of milk production on breastfeeding mother.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

From the results of this study concluded that:
 1. Before giving Katuk Leaves treatment to the postpartum mother, known that there are

Data that obtained from Post – Test.
Table 4.6 Data that obtained from Post– Test conducted to the Fluency of Milk Production (ASI).

NR	Number of List									Total Score
	1	2	3	4	5	6	7	8	9	
1	1	1	1	1	1	1	1	1	1	9
2	1	1	1	1	0	1	0	1	1	7
3	1	1	1	1	0	1	0	0	1	6
4	1	1	1	1	0	1	1	1	1	8
5	1	1	1	1	0	1	0	1	1	7
6	1	1	1	0	0	1	1	1	1	7
7	1	1	1	1	1	1	1	1	1	9
8	1	1	1	0	0	1	0	1	1	6
9	0	1	1	0	0	0	0	0	1	3
10	1	1	1	0	1	1	1	1	1	8
11	1	1	1	1	0	1	1	1	1	8
12	1	1	1	1	0	1	0	1	1	7
13	0	1	1	0	0	0	0	0	1	3
14	1	1	1	1	0	1	1	1	1	8
15	0	1	1	0	0	0	0	0	1	3
Avarage										6.6

Source : Checklist 2014

8 respondent with no fluent milk production, 4 respondent with fluent enough milk production, and 3 respondent with very fluent milk production.

2. After giving Katuk Leaves treatment to the postpartum mother, known that there are 3 respondent with no fluent milk production, 2 respondent with fluent enough milk production, and 10 respondent with very fluent milk production.

3. Calculation results obtained from $t_{\text{calculate}} (5671) > t_{\text{table}} (2145)$, make the H_1 accepted which means there are an effect of Katuk Leaves treatment towards the Fluency of milk production in postpartum mother.

SUGGESTION

ASI is the right of every child. Exclusive breastfeeding mother's knowledge which already owned by every mother can be applied to give breastfeeding for infants at age 0-6

months using katuk leaves treatment in every breastfeeding mother.

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EFFECTIVENESS OF WARM COMPRESS IN REDUCING PAIN CONTRACTION ON FIRST STAGE OF LABOR

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ABSTRACT

Introduction: Childbirth is a physiological process that occurs with pain due to contraction during especially in stage I and II. Response maternal to pain is very different, even still found mothers who can't adapt to the pain, can't control her emotion and will cause other complications during childbirth. A warm compress is one of nonfarmakologi techniques in pain management but for pregnancy and childbirth are not yet widely used. This research aims to analyze the effectiveness of a warm compress in decreasing pain in childbirth contractions of first stage of labor. **Method:** Design of this research is the pre-experimental with the design of One-group pre-post test design. The population used in this research is the mother birthing physiological in BPM Kusmawati Surabaya. A large sample was 20 maternity mother, taken with quota sampling. The independent variable is a warm compress and the dependent is a scale of pain. The instrument is the observation sheet and SOP a warm compress. The data were analyzed using paired samples t test statistical test with a significant α level of 0.05. **Result:** Results paired t test (Paired samples t test) p value = 0.01. **Discussion:** From this result can be concluded that warm compresses is effective in reducing the pain of contractions in the first stage of labor active phase. Based on this it is advisable for birth attendants to be able to implement measures to reduce pain during labor, including by way of warm compresses. This method is effective in addition, it is also very easy and can be done by the family or labor companion.

Keywords: *Warm Compress, Contraction Pain Scale, First stage of labor*

INTRODUCTION

Childbirth is a physiological process that occurs with pain due to contraction during especially in stage I and II. Response maternal to pain is very different, even still found mothers who can not adapt to the pain, especially in primigravida, or the mother who can not control his emotions and was too tired, so this will cause other problems during childbirth (Anik, 2010).

The first stage of labor is too long, especially in primigravida which is about 1-14 hours, the length of this first stage of labor causes pain experienced too much longer so that it can lead to maternal fatigue that result in emotional responses such as anxiety and tension. Long labor pains lead to hyperventilation, which impact on the level of PaCO₂ on Mother then a fetus so that the fetal heart rate slows down. The response to this pain also stimulates increased catecholamines that cause interference on uterine contractions are contractions become irregular/inadequate called inersia uteri which is a cause of prolonged labor. (Bobak, 2011). Results of research conducted by Cheng, et al (2010) found

that prolonged labor increases the risk of postpartum hemorrhage, chorioamnionitis and complications in neonates/newborns.

Efforts to reduce pain can be done by pharmacological and nonpharmacological. Controlling pain with pharmacological among others, by the provision of analgesia inhalation, analgesia opioid, and regional anesthesia, whereas pain control nonfarmakologi include relaxation, breathing techniques, position changes, masage, hydrotherapy, acupuncture, akupressur, hypnobirthing, intradermal water blocks, music, TENS (Transcutaneous, electrical Nerve Stimulation) and warm compresses (Anik, 2010).

Pharmacological methods have a higher effectiveness in reducing pain than non-pharmacological methods, but pharmacological methods can cause side effects that are not expected, while the non-pharmacological method has no side effects at all. To cope with labor pain in BPM Kusmawati Surabaya, using methods of relaxation, Massase and left lateral position. However, to reduce pain with warm compresses yet done.

A warm compress is the maintenance of body temperature method using liquid and tools that can lead to warmer parts of your body requires. Warm compresses on certain parts will improve the circulation of the section, followed by increasing the metabolic activity throughout the body, sweating and relaxation of the network so that the heat is channeled through a warm compress can relieve pain. (Hidayat, 2008).

Warm compresses on the body can be in the form of dry and wet. Dry warm compress can be used locally to heat conduction by using a hot water bottle or electric heating. While the wet warm compresses can be administered via conduction using gauze compresses, packaged heating and bathing / shower. The physiological impact of a warm compress is softening the fibrous tissue, making the body more relaxed muscles, decrease or eliminate pain, and facilitate the supply of blood flow. Warm compresses are made in the lower abdomen, waist, groin and perinium can be very soothing mother (Aprillia, 2014).

The onset of contraction as the source of pain is an important factor in the smooth progress of labor, so the selection of an effort to decrease the pain must observe the intensity of the contractions so that not all methods can be used safely and effectively at the time of delivery. Impact on the intensity of the contraction in this case it will cause complications during labor. Maternal Mortality Rate (MMR) Indonesia at 2012 amounting to 359 per 100,000 live births, while the infant mortality rate (IMR) is 40 per 1,000 live births. MMR in Indonesia cause of maternal deaths are haemorrhage (42%), eclampsia (13%), complications of abortion (11%), infection (10%), and prolonged labor (9%) (Ministry of Health, 2012).

METHODE OF RESEARCH

This study design using pre-experimental design with One-group pre-post test design that seeks to reveal a causal relationship with this kind of Probability Sampling with Quota Sampling techniques, which is to determine a sample of the population that have certain characteristics to the amount of quota to be desired. The population in this study were all birth mothers physiologically active phase of the first stage in Surabaya, 40 BPM Kusmawati birth mothers. Samples are partly physiological birth mothers of the first stage in BPM Kusmawati Surabaya.

Independent variables in this study were warm compresses and the dependent variable is the pain scale. The collection of data through interviews and observations. Researchers measuring the pain scale before applying warm compresses to the contraction peak time after entering the active phase of the first stage, by the way respondents were asked to point number scale of the pain felt at the peak of the contraction.

Researchers give a warm compress to the respondent for 20 minutes with a duration of 5 minutes compress, after five minutes dip a washcloth back into the warm water, then do a warm compress back for five minutes until the total time in the overall warm compress of 20 minutes.

Measurement of pain scale after the intervention at the peaks direct contraction in contraction period after being given a warm compress. Researchers fill the measurement results on the pain scale observation sheets and check the completeness and then do analysis.

Analysis of data using statistical test Paired samples t test at significance level <0.05 .

RESULT

Measurement results can be seen that the pain scale of 20 respondents obtained a mean value of the difference between the level of pain before and after was 2.85 with a standard deviation of 0.29. Statistical test results paired sample t test (Paired samples t test) p value = 0.01 to $p < \alpha$ (0.05), and thus H_0 is rejected, which means there is the effect of a warm compress to the first stage of labor pain relief in BPM Kusmawati Surabaya.

The data collected characteristics of respondents by age and paritas can be seen in the following table.

Table 1. Distribution of respondents by age of respondents.

Age (years)	Frequency	Percentage (%)
< 20	3	15
21 – 35	14	70
> 35	3	15
total	20	100

Table 2 Distribution of respondents by parity of respondents in BPM Kusmawati Surabaya, 2014.

Paritas	Frequency	Percentage (%)
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Primigravida	6	30
Multigravida	11	55
Grandemultigravida	3	15
Total	20	100

Table 1 shows that the majority of the 20 respondents (70%) aged 21-35 years and majority are multigravida.

The level of pain before (pre) do a warm compress on the first stage active phase of maternity physiologically is as follows.

Table 3 characteristics of the level of pain before (pre) do a warm compress on BPM Kusmawati Surabaya

Variable	level of pain before (pre) do a warm compress
N	20
Mean	7,70
Median	8,00
SD	1,89
SE	0,423
Min-Max	3-10

In table 3 above, shows that of the 20 respondent obtained average value level of pain before the warm compress in 7,70 with standart deviation 1,89. And the lowest score is 3 and the highest score is 10.

The level of pain before (pre) do a warm compress on maternity physiologically active phase of the first stage is as follows.

Table 4 characteristics of the level of pain before (pre) do a warm compress on BPM Kusmawati Surabaya

Variabel	level of pain after (post) do a warm compress
N	20
Mean	4,85
Median	5,00
SD	2,18
SE	0,488
Min-Max	1-10

In Table 4 above shows that of the 20 respondents obtained average value level of pain after (post) a warm compress is 4.85 with a standard deviation of 2.18.

The results of the analysis of differences in the level of pain before and after warm compresses using the SPSS statistical test can show in the table below:

Variabel	N	Mean	SD	P Value (Uji
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				Paired samples t test)
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level of pain :
before (pre) – 20 2,85 0,29 0,01
after(post) do a warm compress

Based on table 5.6 above show that from 20 respondents obtained a mean value of the difference between the level of pain before and after was 2.85 with a standard deviation of 0.29. Statistical test results paired sample t test (Paired samples t test) p value = 0.01 < α = 0.05, then Ho rejected, which means there is the effect of a warm compress to decrease the pain of contractions in the first stage of labor

DISCUSSION

The level of pain prior to applying warm compresses to the table 5.4 shows that of the 20 maternity experiencing labor pain when I obtained the value of the average rate of 7.70 pain is severe pain, with a standard deviation of 1.89, and the lowest score was 3 (mild pain), the highest score is 10 (very severe pain). Pain is a personal experience, subjective differ from one to the other person and may also differ in the same person at different times (Reeder, 2011). According to Prasetyo (2010), at the opening of 4-6 cm, felt a little stab of pain. At the opening of 7-10 cm, stabbing pain is felt to be more rigid, the pain is influenced by several factors, factors that affect labor pain are age and parity, culture, coping mechanisms, anxiety and fear, fatigue, duration of labor, fetal position/head, childbirth, past experience.

Labor pain is also associated with behavioral responses that can be observed, for example vocalizations, facial expressions, and body movements. Many ways can be done maternity to divert attention to pain that is experienced, for example, some pregnant women have to walk or move to overcome the pain while the other mothers who feel not withstand the pain experienced and just lay in bed alone. Some are moving their hips as a response to pain during contractions. Such behavior is a sign that depends on the individual response to pain experienced mothers.

Age is one of the factors that affect labor pain. Based on Table 5.1 shows that of the 20 maternity obtained the majority (70%) aged between 21-35 years. Age is a long time since they were born alive (Sarwono, 2005). Age is an

important variable in influencing pain in individuals, a young age tend to be associated with psychological conditions are still unstable, triggering worries that the pain felt becomes more severe. Age is also used as one factor in determining pain. With age and understanding of the pain and anxiety levels in response to reduced pain.

Parity is also one factor mothers who have labor pain seen in Table 5.2 shows that out of 20 maternity obtained the majority (55%) multigravida. Women who had given birth to 2 times or more. In multigravida mother has had previous experience as the previous delivery which will help relieve the pain, because her mother had coping with pain. Primigravida and multigravida likely to respond differently to pain despite facing the same conditions, namely labor. This is due to multigravida mother has had previous experience in labor.

Pain after doing a warm compress on Table 5.5 shows that of the 20 maternity experiencing labor pain when I obtained the value of the average pain level of 4.85 (moderate pain), with a standard deviation of 2.18. Previously, for reducing pain of contraction, mother only allowed to take a deep breath, but there are other ways which can also decrease the labor pain is a technique warm compresses. With this technique warm compress maternity can redirect the pain, the mother is less focused on the pain she experienced contractions, and a warm compress does not reduce contractions. After the birth mothers do a warm compress on the waist will decrease the level of pain, the majority (75%) decrease pain scale of 2-4 and were on the criteria of moderate pain scale, and only the mothers who did not experience a decrease in pain after doing a warm compress which is still in very severe pain scale. Mother's condition when the pain is very influential on the comfort and maternal anxiety in undergoing the process of childbirth, so that pain management in maternity is necessary because it can affect the length of labor and delivery (Aprillia, 2014).

Warm compresses technique is a form of midwifery care, which in this case maternal midwife taught how to do a warm compress, which prepare warm water and a washcloth, then put washcloth into the warm water and then place a warm washcloth on the lumbar region. Techniques warm compresses can also give comfort to the women giving birth in running labor.

The test results using paired samples t test (Paired t test) with a significance value ($\alpha = 0.05$), and then analyzed with the aid of computer calculation SPSS 16.0 for Windows, p value = 0,01 $< \alpha = 0.05$, statistical hypothesis H0 rejected, which means there is influence of a warm compress to the first stage of labor. In table 5.6 above can be seen that out of 20 women giving birth before warm compresses obtained average value is 7.70, the level of pain (severe pain) with a standard deviation of 1.89, while warm compresses obtained after doing the average value level pain was 4.85 (pain rsedang) with a standard deviation of 2.18.

This shows the before and after warm compresses very influential in controlling or diverting pain. Which at the time gives a warm compress treatment must be supported with a quiet environment, try to keep your mind calm and relaxed, comfortable position, and maternal desire to do a warm compress. With this warm compresses mother can redirect the pain by reducing the sensation of pain and to control the intensity of the reaction to pain. When emotional pain is reduced, the effect of which can worsen anxiety seemed diminished by doing warm compresses. A warm compress is an effective method, especially in patients with chronic pain. Warm compress technique can eliminate the sensation of pain and reduce stiffness. (Anik, 2010)

CONCLUSION AND RECOMMENDATION

Results of research has been done on maternal on first stage of labor in get that pain scale before a warm compress on average 7.70 (severe pain) with a standard deviation of 1.89. Meanwhile, after a warm compress average pain scale was 4.85 (moderate pain) with a standard deviation of 2.18. Warm compresses can be concluded effective in reducing the pain of contractions in the first stage of labor active phase.

Based on this it is advisable for birth attendants to be able to implement measures to reduce pain during labor, including by way of warm compresses. This method is effective in addition, it is also very easy and can be done by the family or labor companion.

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THE EFFECT OF DATE PALM FOR THE SMOOTHNESS OF BREAST MILK ON POST PARTUM MATERNAL

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ABSTRACT

Introduction: breast milk is a gift of God and a tremendous boon to every baby born into the earth. Qur'an mention many times about the importance of breastfeeding. Meanwhile in the Qur'an also mentions the material which contributes to enhance the quality of breast milk. This material is called date palm. The nutritional content of these dates are needed for breastfeeding mother. In addition, one of the chemical elements contained in dates is oxytocin is able to tighten the smooth muscle around the alveoli to squeeze the milk to the milk ducts. Oxytocin plays a role in the process of breast milk which is often called a let-down reflex. **Methods:** This study aimed to analyze the effect of palm dates for the smooth of breast milk. This study used an experimental method which was called *experiment quasy*. It used also *control time series design* approach. The sample in this research was the post partum mothers who breastfeed their babies in BPM Umi Salamah, AMd Keb. **Result:** Results of statistical test Mann-Whitney U test with SPSS is obtained with Asymp.Sig 67,500. (2-tailed) 0.061 more than 0.05 which means there is an influence of date in the smooth effect of breastfeeding on post partum mothers. **Discussion:** There is the influence of consuming date palm on the smooth of breast milk on post partum mothers at Umi Salamah AMd Keb. peterongan Jombang.

Keywords: Dates, Breast milk, Post Partum

INTRODUCTION

Breast milk is a gift from God, given to all baby born through the mothers. In Quran, there are many explanations about breast milk which emphasized that it is very importance thing. Based on the result of the research at pediatric journal Ghana shows that the given of breast milk at the first day is able to prevent 16 % of infant mortality. Moreover, if the baby gets the breast milk, an hour after birth, this percentage will raise into 22%.

This proves that breast milk is the best source of nutrient of to prevent respiratory infection, diarrhea, and allergic, skin disease, asthma, obesity and developing the intelligence, spiritual, and emotional development.

The research study in 42 countries showed that exclusive breast milk contributed to the decrease of death infant mortality. The decreased was around 13% than other health intervention in society (Roesli, 2008). However, based on base health research data 2010 showed that the given breast feeding to

the baby was poor. Moreover, the percentage of exclusive breast milk for the baby for 6 month was only 15,3 %.

However, the different thing occurred in east Java. Based on East Java Province Health Office profile data, in 2010, there was an escalation dealing with exclusive breast feeding from 31,21%(2010) into 61,52%(2011). In contrast with the occurrence of breastfeeding in the province, exclusive breast feeding in Jombang intended to decrease based on 80% of national target. In 2009, the percentage was 65%, but it decrease into 53% in 2010. However, it raised again into 79,4%.

The children have potencies and skills to build the nation. As a human being, they have a right to get protection, compliance and a reward. Moreover, they have to be prepared early by a right effort, well planned, continuously to achieve the high quality of physical mental, social and spiritual development. One of the efforts to undertaking the high quality of growth development is the best feeding from the birth until two years. The appropriate

feeding for the baby and early childhood (0-24 months) is breast feeding (ASI). It deals with the purpose of MDGs to decrease the infant mortality into 20% .

The food consumed by breastfeeding mother gives affection to breast milk production. As mother eats adequate nutrient and having fairly regular consumption, breast milk production will proceed smoothly.

Date palm has many good nutrients for human body. It grows from palm tree, which include in the family of *Arecaceae* and the genus of *Phoenix*. In Qur'an, date palm is mentioned as a heaven fruit. It means that the fruit has an extraordinary. Qur'an stated that: *In both of them are fruit and palm trees and pomegranates* (Ar-rahman;68).

The maturity of date palm contains 80% of sugar, and the rest are protein, fat, mineral product including copper, iron, magnesium, and folic acid. Moreover, the nutrient of palm date is needed by breast feeding mother. In addition, one of the chemical elements of palm dates is oxytocin which able to tighten the smooth muscle around the alveoli to squeeze the milk to the milk ducts. Oxytocin have importance role in the process of milk-ejection or we called as *let-down / milk ejection reflex*. The Purposes of this study were to identifying the smoothness of breast milk given by date palm, identifying the smoothness of breast milk that not given by date palm, analyzing the effect of date palm on the smooth breast milk at post partum maternal.

RESEARCH METHOD

The research' design applied experiment method. It was a research to hold an experiment to find out the symptoms and the effect resulting as an influence of particular treatment. It used *Quasy Eksperimental Design with control time design series*.

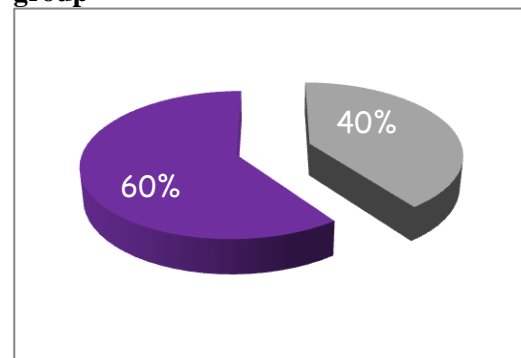
Place and time of the research was held on June till August 2015 at BPM Umi Salamah peterongan Jombang. The population of the research was the postpartum maternal at BPM Umi Salamah peterongan Jombang and the sample of the research was postpartum maternal who give breastfeeding at BPM Umi Salamah peterongan Jombang. The first post partum, the history of normal labor process, giving breast feeding, healthy mother and the new baby born, labor process at BPM Umi Salamah. The First Variable is Giving date and

Operational Definition is Giving 6 date palms each day to post partum maternal, that gave breast feeding. And the Second Variable is the smooth of breast milk and the Operational Definition is Smooth milk production. Indicators assessment: the milk can leak out through the nipple, before giving the milk, the breast will be strained, the baby will do urination 6-8 times a day, baby looked calm (non fussy)sleep well for 2-3 hours, well skin turgor and muscle tone, the increasing of bodyweight 500 gram per month. Measuring instrument is observation criteria: the smooth of breast milk had to meet 6 indicator of smooth breast milk, breast milk was not smooth if they did not meet the indicator with Scale: nominal. The writer used observation smooth breast milk sheet instrument which contain 6 statement, referred to indicator of smooth breast milk.

This research used a bivariate statistical test (with two variables). The scale of this research was nominal, so that the researchers chose chi-square test as hypothesis testing

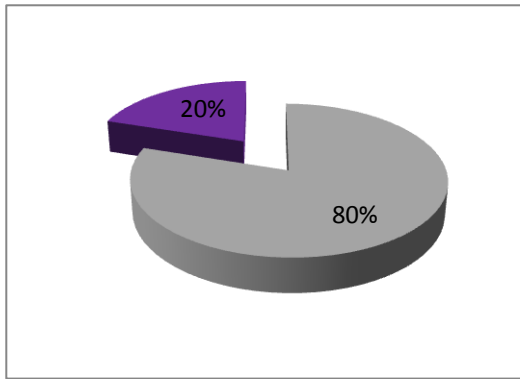
RESULT

Diagram 1. Distribution on the control group



Above data shows that 40 % of respondent in control group had a smooth breast milk.

Diagram 2. Distribution at the experiment group



Above table data shows that 80 % of respondent in experiment group had smooth breast milk.

Tabel 1. Giving date palm for the smooth of breast milk

	N	Count	Group		Total
			Contr ol	Treatm ent	Contr ol
BREA			9	3	12
STFE		%			
EDIN		within	75,0%	25,0%	100,0
G		ASI			%
		%			
		within	60,0%	20,0%	40,0%
		Kelom			
		pok			
		% of			
		Total	30,0%	10,0%	40,0%
		Count	6	12	18
		%			
		within	33,3%	66,7%	100,0
		ASI			%
		%			
		within	40,0%	80,0%	60,0%
		Kelom			
		pok			
		% of			
		Total	20,0%	40,0%	60,0%
Total		Count	15	15	30
		% within	50,0%	50,0%	100,0
		ASI			%
		% within	100,0	100,0%	100,0
		Kelompok			%
		% of Total	50,0%	50,0%	100,0
					%

Based on *mann-Whitney U* statistic result test with SPSS program, is 67,500 with *Asymp.Sig.(2-tailed)* 0,061. This means that

date palms give an effect to the smooth of breast milk at post partum maternal. First diagram shows that post partum maternal 40 % had a smooth breast milk and 60% was not. Breast feeding is influenced by the frequency of breastfeeding, birth weight, gestational age at birth, age and parity, stress and acute diseases, tobacco consumption, alcohol consumption, hormonal contraceptive pills and injections and physiological factors.

Second diagram shows that 80 % of post partum maternal in experiment group had smooth breast milk while 20% was not.

Tabel 2. Data analysis Result

	BREASTFEEDIN G
Mann-Whitney U	67,500
Wilcoxon W	187,500
Z	-2,198
Asymp. Sig. (2-tailed)	,028
Exact Sig. [2*(1-tailed Sig.)]	,061(a)

DISCUSSION

Date palm is the source of dietary fiber and antioxidants. According to International Journal of Food Science and Nutrition, July 2003, date palm contains one of chemical element which is called oxytocin. It is able to tighten the smooth muscle around the alveoli to squeeze the milk to the milk ducts. It also has an important role in the process of breast milk which is called *let-down / milk ejection reflex*. Based on a study in the Journal of Obstetrics and Gynecology, it is found that women who ate six dates palm a day for four weeks prior to the date of birth can reduce the risk of doing induction of labor and childbirth safer than women who did not consume dates.

This research was supported by another study in 2007 Shiraz E-Medical Journal reported that women who consume dates palm reducing bleeding after delivery than women who were given oxytocin to reduce bleeding, it offers a more natural alternatives. (Zantesen, 2013).

Based on *mann-Whitney U* statistic result test with SPSS program, is 67,500 with *Asymp.Sig.(2-tailed)* 0,061. This means that date palms give an effect to the smooth of breast milk at post partum maternal

CONCLUSION AND RECOMMENDATION

Conclusion

The date palm was not given to maternal post partum caused 40% the breast milk was smooth and 60% was not. The date palm was given to maternal postpartum caused 80% breast milk smooth and 20% was not. The date palm consumed contributed to the smooth of breast milk at post opartum maternal

Recommendation

Giving the date palm to post partum maternal contribute to the smooth of breast feeding. It is caused by the oxytocin which is one of the importance reflect for breast feeding.

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GROWTH AND DEVELOPMENT OF PRESCHOOL CHILDREN IN KINDERGARTEN CHILDHOOD ABA 1 LAMONGAN

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ABSTRACT

Introduction: The growth issues related to the change in the physical size while developments related to increasing ability of body function or ability of individuals to learning all skills needed. Both of these processes occurs in harmony in every individual. The goal of this research is to know the growth, development and emotional mental of preschoolers. **Methods:** The type of this research is description, the number of respondents 96 of preschoolers in kindergarten – childhood ABA 1 Lamongan. **Results:**Results of research indicate the majority (63.54%) children had normal nutritional status. Almost all of (96,8 %) the child had normal head circumference, almost all about (93,75 %) child development is suitable, 100% the child had a normal vision, and 100% the child had a normal hearing. Almost all (97, 92) children do not have emotional mental problems and all (100%) there is not children attention deficit and hyperactivity disorder. **Discussion:** From the result of the research recommended to suggested that educational institutions are able to perform early detection of developmental disorders of children and more gives stimulation to optimize the growth and development of preschool children.

Key Words : *Growth, Development, Preschool children*

WRITING EMOTIONAL EXPERIENCE TO DECREASE AGGRESSIVE BEHAVIOUR IN ADOLESCENTS IN BLAJO VILLAGE SUBDISTRICT KALITENGAH

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ABSTRACT

Background : Adolescence is a period of transition, as well as a change in his physical, psychological, and emotional, if teens are not able to adjust the changes that happened, it will rise to frustration, which leads to aggressive action. This study aims to know the effect of writing emotional experience to decrease aggressive behavior in adolescents in Blajo village Subdistrict Kalitengah. **Methods :** This research design was one group pretest-posttest. The sample was all of teenager in the Blajo village Subdistrict Kalitengah as many as 35 teenagers, in January 2015 to March 2015. Data were collected using a diary, a pen and a sheet of aggression questionnaire test using Wilcoxon signed rank test with a significance level of 0.05. **Results :** The research results showed that adolescent aggressive behavior after giving the intervention of writing emotional experience is almost entirely 85.7% behaving mild aggressive and 14.3% fraction behaving low aggressive. The results of statistical tests are obtained the results have influence between writing an emotional experience to decrease aggressive behavior with the value of $Z = -5,477^a$ with $P = 0.000$ where $P < 0.05$. The research results are there is influence of writing emotional experience to decrease aggressive behavior in adolescents in the village Blajo subdistrict Kalitengah. **Conclusion:** Based on these results, so writing emotional experience is an important factor that should be applied in daily life to decrease aggressive behavior.

Keywords: *Adolescents, Aggressive Behavior, Written of Emotional experience Therapy, Aggression Questionnaire.*

IMPROVED THE ABILITY OF CAREGIVER AND MOTHER IN TAKING CARE OF CHILDREN PERSONAL HYGIENE IN CHILD CARE CENTRE APPROACH TO EDUCATION AND TRAINING: THE COMMUNITY SERVICE

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ABSTRACT

Introduction: Children in daycare are required to stay, eat together, play together with other children who have a diverse range of health problems, so the risk of transmission of infectious disease in a daycare is very high. Personal hygiene impact the general health condition and a way to prevent infectious diseases. Children are also cared for by the mother at home. Nursing personal hygiene must be sustainable either at home or at daycare for the prevention of transmission of infectious disease in children, so the purpose is to increase the ability of the caregiver and the child's mother in taking care of personal hygiene. **Method:** Education and training with a modified method of simulation and group discussions. Training is done through direct mentoring and coaching skills of mothers and caregivers in making personal hygiene. Instrument for evaluation using questionnaires and observation. This community service has been implemented in Jasmine daycare in March 2016. The number of participants were 13 participant. **Result:** After the intervention shows that the increase in the ability of all participants, namely 12 participants (92%) have increased their skills and only one person that has the capacity enough after the intervention, which previously had less ability. Observations show the differences skills of the participants practice in caring for the child personal hygiene before intervention. Participants of community service before the intervention have less ability to care for children personal hygiene, before the intervention of five participants (38%) have less ability to care for children personal hygiene. **Conclusion:** Education and training is an effort to develop intellectual skills and influenced by participants, facilitators and the methods used. Simulation methods and group discussions present a real and an increase in new experiences from other participants can realize an increase in skill.

Keywords: *Personal hygiene, Child Care Centre, Education and training*

THE ANALYSIS FACTORS OF FAMILY SUPPORT RELATED TO EXCLUSIVE BREASTFEEDING BASED ON PRECEDE PROCEED THEORY IN PUBLIC HEALTH CENTRE RINBESI ATAMBUA SELATAN

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ABSTRACT

Introduction: Family Support is needed to help mother to give exclusive breastfeeding. Family Support can be influenced by several factors, such as knowledge, attitude, culture, resources and the role of health workers. This Study was aimed to analyze those factors related to family Support in Public health centre Atambua Selatan. **Method:** This Research used cross sectional design. The population were 44 mothers of the breastfeeding mothers and breast feeding mother who have infant with age 0-6 months. Purposive sampling was used to select 26 eligible participants. The variables in this study were knowledge, attitude, culture, resources, and the role of health workers. The dependent variable was family support. Data were collected through questionnaire and analyzed with spearman's Rho correlation test with level of significant $p < 0,05$. **Results:** Result showed that the family's knowledge ($p = 0,889$), attitude ($p = 0,635$), respurces ($P = 0,651$), and the role of healt workers ($p = 0,169$) were not significant, Culture ($0,001$) is wassignificant. **Discussion:** Based on Data analysis, it can be concluded that there were no correlation between knowledge, attitude, resources, and the role of health workers with family support with exclusive breastfeeding in Public health centre Atambua Selatan but there is correlaion between culture with family support for exclusive breastfeeding in Public health centre Atambua Selatan. Therefore, more research is needed to involving the family in improving the successful of exclusive breastfeeding.

Keywords: *Knowledge, attitude, Culture, resources, Family Support.*

THE DIFFERENCES FINE MOTOR DEVELOPMENT ON PRESCHOOL CHILDREN THROUGH COLLAGE AND CLAY ART THERAPY

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ABSTRACT

Introduction: Fine motor development is important and must be given some attentions. Collage and clay are kind of the art therapy that can be used to improve fine motor development in preschool children. The purpose of this study was to analyze the differences in fine motor development on preschool children through 2-dimensional art therapy by using collage and 3-dimensional art therapy by using clay in PG Islam Maryam Surabaya. **Method:** This study was pre-experimental design with one group pre-posttest design. The populations were all of the students in PG Islam Maryam Surabaya were 19 students. Total sample were 14 students taken according to inclusion criteria which consist of 7 students for Collage art therapy and 7 students for Clay art therapy. The independent variables were Collage and Clay art therapy. The dependent variable was fine motor development. Data were analyzed by using Wilcoxon Signed Rank Test and Mann-Whitney U Test with significance level $\alpha=0.05$. **Result:** The result showed that there is no difference in children's fine motor before and after the collage art therapy given ($p=0.157$), there is difference in children's fine motor before and after the clay art therapy ($p=0.046$), also there is no difference in children's fine motor after collage and clay art therapy are given ($p=1.000$). **Discussion and Conclusion:** It can be concluded that both of collage art therapy and clay art therapy can improve fine motor development of preschool children however Clay art therapy has more effect for increasing fine motor development of preschool children. Clay has a soft texture and it is possible for children to squeeze, pinch from the dough. These activities are useful to stimulate the flexibility of smooth muscles of the fingers. Further studies should involve larger respondents to obtain more accurate results.

Keywords: *art therapy, clay, collage, fine motor development, preschool children*

THE INFLUENCE OF GURAH FREQUENCY, ON THE INCIDENCE OF VAGINAL DISCHARGE

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ABSTRACT

Introduction:Gurah vagina is a treatment by curing directly towards the vagina to reduce vaginal discharge, moisture balance, tighten the sex organs and increases confidence in the pair. This treatment should be done once a month or twice a month. But was in fact there are women still do gurah vagina every week. The purpose of this research was to determine the influence of gurah frequency on the incidence of vaginal discharge study in Salon HikmahBangkalan.. **Method:** This type of this research is analytic using infinite population where the investigator waited for the period of November 12 - December 10, 2015 amount 44 samples using nonprobability Sampling technique with accidental sampling. gathering data using questionnaires. The data analysis of univariate, bivariate by using statistical test Chi Square, by nominal and ordinal scale with a degree of error $\alpha = 0.05$.**Result:** The results showed that 4 (9.1%) experienced a pathological vaginal discharge and 40 (90.9%) experienced a physiological vaginal discharge. Based from the crosstab found that the frequency of 3 people and sometimes one person who experience vaginal discharge pathology. Based on statistical tests obtained p value = 0,146 $< \alpha = 0.05$, H_a refused and H_o accepted. The conclusion from this study is there is no effect of vaginalgurah frequency on vaginal discharge to the women who do gurah vagina in the Hikmah SalonBangkalan.**Discussion:**For women who want to perform gurah vagina, must be considered in good health without vaginal discharge wick smell colorless, and itching.

Keywords::*Gurah Vagina , Vagina Discharge*

EFFECTS OF AGE, PARITY, SETIO CAESAREA HISTORY AND PROM ON SECTIO CAESAREA LABORS IN RSUD SYARIFAH AMBAMI RATO EBUH BANGKALAN

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ABSTRACT

Introduction: SC labor is one of the alternative methods of labors when normal labor can't be performed due to certain indications. This research was aimed to analyze the effects of ages, parity, SC history and PROM on SC labor. **Method:** This research employed a cross sectional design. Independent variable was age, parity, SC history and PROM and dependent variable was risks of SC labor. Population consisted of 675 mothers and sample which used a simple random sampling technique consisted of 251 mothers. Data collection technique used documentation of medical records and data analysis technique used tests of Chi Square, Lambda and logistic binary regression. **Result:** The result showed that there were effects of ages on acts of SC labors ($p=0.034$), parity on risks of SC labors ($p=0.000$), SC history on risks of SC labors and PROM on risks of SC labors ($p=0.000$). data analysis showed that the most influential factor on SC labor was PROM and SC history with value OR 5.418 and OR 3.164. **Discussion:** The previous research showed that the majority of mothers (58%) gave birth to babies in SC labor in RSUD Syarifah Ambami Rato Rato Ebu 2014. This occurred due to some obstacles such as ages < 20 years and > 35 years, grande multipara (high parity), SC history, and PROM. Early detection and quality ANC are any efforts to decrease the rates of SC labors.

Keywords: age, parity, Sectio Caesarea history, PROM (Premature Rupture of Membrane), Risk of Sectio Caesarea labors.

TEMULAWAK CONSUMPTION BY THE EFFECT ON POSTPARTUM MOTHER LACTATION

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ABSTRACT

Breast milk is the exclusive food for babies, nutritional value contained in breast milk is very high that he actually does not require any additional external composition. In fact there are many mothers that breastfeeding postpartum was not smooth, as coverage in the village of UPT PuskesmasPoreh Working Area entirely Lenteng 20 respondents (100%) that her breast milk is not smooth. The purpose of this study was to analyze the effect of ginger consumption by postpartum mothers to lactation. Independent variables are Temulawak consumption, while the Dependent Variable is the smoothness of milk production. The study design used is a pre-experimental study with pre-test and post-test group design. The population 20 puerperal women in the village Poreh Work Area UPT PuskesmasLenteng in July and August 2015. In its sample 20 respondents, taken by nonprobability sampling. Data collection methods such as observation sheets and then analyzed by Paired t-test with significance level $\alpha = 0.05$., who breastfed her smoothly as many as 18 respondents (90%), and that her breast milk is not smooth 2 respondents (10 %). From the statistical test result obtained Paired t-test p value $< \alpha$ which means (0,000 $< 0,05$), which means that H0 rejected H1 accepted which means there Effect Consumption of Mother Ginger By Ruling Against Smooth milk production. This study is expected to postpartum mothers whose milk production was not well can consume ginger, because the results of research on the consumption of ginger affect lactation.

Keywords: *Consumption Temulawak, Smooth milk production.*

A LITERATURE REVIEW : THE EFFECTIVENESS OF USING GUIDED IMAGERY THERAPY TO REDUCE PAIN IN CHILDREN

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ABSTRACT

Introduction: Pain in children is a common complain because procedures performed during hospitalization. Pain management is part of traumatic care, which is the main principle in nursing care of children.. Guided imagery is one form of self-regulation therapy. During the process, a state of deep relaxation (PMR) which allows the subject to then be guided in actively creating images that facilitate resolution of certain problems. The aims of this literature review was to find a method of Guided Imagery appropriately applied for all kinds of pain children who was experiencing hospitalization. Literature review was include 7 journals done by EBSCO host data bases, MEDLINE, SAGEPUB, Science Direct and Proquest with keyword *Child Pain*, “*Guided Imagery*”, and “*Breathing Relaxation*”. **Method:** The study examined in this review there are 7 experimental research. Five research experiment studies were analyzed using the method of randomized control trial and two research using quasy experiment with non random sampling technique. Variables such as Guided imagery therapy and level of pain. Population using school-age children (6 -18 years). **Result:** The findings of the experiment research describes that Guided Imagery safely and effectively reduce pain in children during hospitalization. The results of experimental research findings guided imagery techniques along with progressive muscle relaxation is more effective than breathing and relaxation techniques for reducing pain episodes and missed activities in children during hospitalization. The conclusion that guided imagery was an effective and safe treatment for children.

Keyword : *Child, Pain, Guided Imagery*

THE EFFECT OF NURSE THERAPEUTIC TOUCH THERAPY TO HOSPITALIZATION STRESS ON PRESCHOOL (AGED 3-6 YEARS) WHO GIVEN INFUSE INSTALATION PROCEDURE IN ADI HUSADA HOSPITAL SURABAYA

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ABSTRACT

Introduction: Infuse installation procedures and stress of hospitalization could be the first crisis faced by children. At preschool age, children who were treated with infuse instalation procedure in hospital showed maladaptive response. Stress hospitalization is a response of person's body during received treatment at the hospital. Therapeutic touch therapy is nurse specific exercise therapy that developed touch contact and non-contact which useful to reduce maladaptive stress responses that be done when children showed behavioral stress. The study aimed to analyze the effect of therapeutic touch therapy to hospitalization stress in children aged 3-6 years who performed infuse instalation procedure. **Method:** Design of this study was quasy-experimental, with pre and post experiment approach. The total sample was 24 respondents who were taken using consecutive sampling technique. Independent variable of this study was therapeutic touch therapy and the dependent variable was hospitalization stress. Data were taken using standard operational procedures (SPO) as instrument and observation sheet then analyzed with Wilcoxon signed rank test. **Result:** The results of the treatment groups showed a significance level at $\alpha = 0.05$ meaning hospitalization stress that caused by infuse instalation procedure has reduced because the results showed $p = 0.003$. The result of Mann-Whithney test showed a significant level of $p < 0.05$, where the hospitalization stress due to infuse installation procedures showed the value of $p = 0.028$. **Discussion:** Therapeutic touch therapy can reduce hospitalization stress in children aged 3-6 years. The result of this study can be one of the alternative methods to reduce hospitalization stress in children aged 3-6 years who performed infuse instalation procedure.

Keywords: *hospitalization stress, therapeutic touch therapy, preschool*

INTRODUCTION

Children not always in optimal state of health in their growth and developmental stage but in the healthy and ill span (Hidayat, 2005). To achieve recovery, sick children required hospitalization, health services provided include promotive, preventive, curative and rehabilitative effort (Supartini, 2004). Children will get a various curative medical action from medical doctor or nurse during curative treatment, and often are invasive procedures (Wang, Sun & Chen, 2008). There are several cause of stress hospitalization in children, one is invasive procedures (Coyne, 2006). Infusion installation procedures cause stressful conditions in children because during the

process they will feel pain as a result of suddenly puncture and discomfort due to foreign objects attached body part. Stress hospitalization is an unpleasant feeling that cause children traumatized by invasive procedure. Many things done for children such as diseases treatment and prolong life span from trauma, pain, sadness, and fear (Ball & Binder, 2003). The results of preliminary study in Adi Husada Hospital in Surabaya, so far no significant efforts undertaken by nurses in Adi Husada hospitals to cope with hospitalization stress caused by the infusion installation procedure. Therapeutic touch therapy is one of complementary therapies that can be applied to

children, in besides economical and efficient therapy because does not require much costs and could be carried out anytime and anywhere also can be used to reduce hospitalization stress. Efforts to reduce trauma of invasive procedures not able to overcome only by medical treatment such as relaxation and analgaesic medication to reduce children's stress due to physical trauma that makes them fear of hospital, but the effect of therapeutic touch therapy to cope with the hospitalization stress during infusion installation procedure still could not be explained.

Generally, children who are hospitalized will develop fear, because they think that they will be hurt. During preschool children development (ages 3-6 years), mentioned in Muscari (2005), that children experience at this age generally feelings of fear more dominant than other age period. Pre-school children during hospitalization have various amount and reasons. In United States, estimated the number of children undergoing hospitalization each year ranges from 5% that not include elective surgery cases experienced by children (Perrin, 1993, in Clatworthy, Simon & Tiedeman, 1999). Every year more than 5 million children in the United States undergo surgery and 50% children reported to have behavior changes significantly (Cain, et al, 1996, in Kain et al., 2006). Purwandari (2011) study in Margono Soekardjo Hospital Purwokerto showed that 25% of hospitalized preschool children experiencing severe stress, 50% with moderate stress, and 20% with mild stress.

Based on results from preliminary study conducted by researcher at Adi Husada Hospital Surabaya in December 2015, it showed that the hospital has children-care ward. Data from July-September 2015 there were 339 children treated in Adi Husada hospital and care for 113 children (33.4%) average monthly in the last 3 months. Age of children admitted in this room varies from age 1 month to 12 years and 29 children (25.7%) preschool children (ages 3-6 years) per month on average. According from interviews results with nurse charge in children ward Adi Husada Hospital, 75% children who were treated showed fear and crying responses, 70% were agitated and angry when approached especially nurses and medical doctors going to do the medical procedure, and 15% children stay quietly. Results of observations in December

2015 to 15 hospitalized pre-school children in the children ward Adi Husada Hospital showed that 12 children (80%) experiencing hospitalization stress with responses: refusing to eat, less cooperative, often asked, crying, and anger either verbal or behavior during invasive procedure taken by nurses or when examined by a medical doctor.

Hospitalization stress will cause discomfort both in children and families, so it needs adjustment process to reduce and minimize stress in order not to develop into crisis. Nurse is one of health team members has a role and responsibility in minimizing the hospitalization stress in children, because during 24-hour nurse always stand beside the patient. According to Roy (Nursalam, 2008), nursing care service recipients are individuals, groups, families and communities or social, each required by nurses as a holistic and open system adaptation. The open system impacting to the change, with that change individual must maintain their integrity by adapting continuously. Touch therapy is a therapy that has been known since long time ago and has been known for generations in Indonesia. Touch therapy in infants is a soft and gentle touch movement.

This research aims to understand the effects of nurses therapeutic touch therapy to decrease the hospitalization stress responses of children aged 3-6 years who performed infusion invasive procedure in Adi Husada Hospital Surabaya

METHODS

The research is quasy-experimental, with pre and post experiment approach. Data were taken using standard operational procedures (SPO) as instrument and observation sheet. The sampling method used in this study was consecutive sampling technique. Data analysis performed with purpose to answer hypothesis research.

RESULTS

Based on table 1 obtained pre-test data in the intervention group there were 9 respondents (75%) showed maladaptive responses and 3 respondents (25%) showed adaptive response to hospitalization stress, as well as in the control group there were 7 respondents (58%) showed maladaptive responses and 5 respondents (42%) showed adaptive responses to hospitalization stress,

after delivered therapeutic touch therapy to intervention groups indicated by post test data, 1 respondents (8%) showed maladaptive responses and 11 respondents (92%) showed an adaptive response to hospitalization stress. In control group showed 7 respondents (58%) showed maladaptive responses and 5

Table 1 Stress hospitalization in intervention and control groups before and after intervention

Stress response	Respondents			
	Hospitalization stress			
	Intervention group		Control group	
	Pre-test	Post-test	Pre-test	Post-test

the stress response reduction of hospitalization stress between intervention group and the control group after delivered therapeutic touch therapy.

DISCUSSION

The stress response in children aged 3-6 years who were treated in Adi Husada hospital Surabaya before delivered therapeutic touch therapy.

1. An overview of the stress response due to separation

The results of the research showed data pre-test in the intervention groups that hospitalization stress due to separation have greater percentage than post-test. After being delivered therapeutic touch therapy by nurses maladaptive response to stress of hospitalization were decreased indicated by post-test data in the intervention group, the hospitalization stress due to separation, majority of respondents (9 children) showed adaptive response and 3 respondents showed maladaptive response. While the control group showed less than fifty percent indicate an adaptive response in 5 children (42%) and 7 respondents showed maladaptive response.

These results are consistent with the theory by Wong (2008), which states that in early childhood as a result of separation, anxiety is the greatest stress caused by hospitalization. If in the separation phase can be overcome by children, they will have enough experience to deal with other stress, the data also showed that most children who have maladaptive response to separation is at the age of 3 and 4 years than ages 5 and 6 years. It is proved that age factor is also influential in children's ability to respond to

respondents (42%) showed adaptive response to hospitalization stress. Statistical test results by Wilcoxon signed rank test in intervention group obtained significance data $p = 0.003$, whereas the control group $p = 0.655$. Based on the results of Mann Whitney test post test $p = 0,028$, indicated that there were differences in

	Σ	%	Σ	%	Σ	%	Σ	%
Maladaptive	9	75	1	8	7	58	7	58
Adaptive	3	25	11	92	5	42	5	42

Wilcoxon test=0,655

Wilcoxon test = 0,003

Mann Whitney test =0,028

hospitalization. Thus it necessary to adaptation, in which the adjustment to the needs or new guidance, it is an attempt to find balance back into a normal state (Rasmun, 2004). Based on research data in the intervention group and control group, almost all respondents aged 3 year are at maladaptive level. Younger children will show emotional responses higher than older children so that the adaptation level that shown still leads in maladaptive response, supported by respondents in this study have no participation of their parents, respondents' parents always scare children with the nurse action in providing nursing care both hurtful procedure or not.

2. Description of the stress response as a result of losing control

The results showed that data obtained from pre-test data in the intervention group showed more than fifty percent of respondents indicate maladaptive responses, 8 respondents (68%) indicate maladaptive responses and 4 respondents indicate an adaptive response. After delivered therapeutic touch therapy children demonstrate decreased hospitalization stress response that showed by post test data in the intervention groups showed most respondents indicate an adaptive response by 10 respondents (84%), while two respondents indicated maladaptive response.

One of the factors that influence response to hospitalization stress is the amount of control that children felt as a result of ill and hospitalized, children will lose the freedom of egocentric view to developing his autonomy. Children at the age of 3-6 year that losing control can be caused by physical restriction, routine change and dependence that must be obeyed.

This is consistent with the theory by Nursalam (2005) on efforts to minimize the sense of loss, attempts to minimize the sense of loss can be done with attempt to freedom of movement, maintain routine freedom of children, encourage children to be independent. Stress hospitalization due to loss can be associated to gender, most children who experience maladaptive stress response is a boy, this could be caused by the age of 3-6 years is the active phase play for the boys, so boys more likely to experience stress of hospitalization due time and his freedom in limited play. Things to consider in minimize hospitalization stress in pre-school children is to establish freedom of movement, maintain play activities, maintain regular activities and encourage interdependent.

3. Overview of injury as a result of the body's stress response

These research results indicate obtained data before delivered intervention in the intervention group there were 9 respondents had maladaptive responses and 3 respondents indicate an adaptive response. After delivered therapeutic touch therapy intervention in the intervention groups as indicated by post test data of hospitalization stress due to injury in the body, majority respondents indicated adaptive response, 11 respondents (92%) showed an adaptive response, and 1 respondent showed maladaptive response.

Nursalam (2005) states that the toddler responses to pain is same as when they were baby, but the number of variables that affect the response is more complex and various kinds. Children will react to pain with grinning faces, tears, clenched teeth, biting her lip, with wide open eyes, or perform aggressive actions such as biting, kicking, hitting, or ran out.

According to Roy adaptation model starting from input, input in this study was therapeutic touch game by nurses as a stimulus. Stimulus will affect the adaptation process that used as coping mechanism, especially in this case is to face the pain. Children aged 3-6 years have been able to point the location of the pain and can use the pain scale with the right of a painful stimulus that they receive. Based on observational data it can be associated with a diagnosis experienced by children, most children who experienced maladaptive response is a child with a diagnosis of GEA and typhoid, because children with high and serious disease will

receive more medical treatment and nursing care, infusion installation for example.

The results of the study stress response of children aged 3-6 years who were treated in Adi Husada hospital before being delivered therapeutic touch therapy were 24 respondents, then divided into control and intervention groups observed after the pretest, found 9 respondents (75%) who experience maladaptive stress response in the treatment group, whereas the control group was found 7 respondents (58%) experienced a maladaptive stress response. Data showed of the 9 respondents from treatment group who had made observations pre-test regarding physiological responsiveness due to injury obtained data 9 respondents showed an verbal aggressive attitude, 9 respondents indicates uncooperative action, 9 respondents ask to stop treatment procedures and 6 respondents tried to shout and dare/attack, it can be concluded that respondents had maladaptive stress response due to injuries to the body in this case is the result of infusion invasive procedures.

These results are consistent with the theory by Nursalam (2005) that said that toddler's reaction to pain is same as when they were baby, but the number of variables that affect the response is more complex and various kinds. Children will react to pain with grinning faces, tears, clenched teeth, biting her lip, with wide open eyes, or perform aggressive actions such as biting, kicking, hitting, or ran out.

This is in accordance with what happened to respondents based on observations, the respondent before the delivered therapeutic touch therapy exhibit crying, showing withdrawal, often calling parents, children often refuse to eat and drink, children seem to be afraid because they do not want performed infusion procedure, children become spoiled to his mother, and less active while in the room, even some children who showed aggression verbally, sometimes they will not cooperate during the treatment process, some children is crying, screaming, sometimes there attacking nurses currently doing infusion procedure, and also to stop the infusion process.

4. Influence therapeutic touch therapy to hospitalization stress in children aged 3-6 years who were hospitalized in Adi Husada Surabaya after given therapeutic touch therapy

The results showed there were effect of therapeutic touch therapy in decrease

hospitalization stress preschool children. Most children who previously had maladaptive response become adaptive response, in comparison Mann Whitney test results on the stress response of hospitalization in the Intervention and control groups showed $p = 0.028$, this showed there was difference between the Intervention group and control group. However there was one respondent Intervention group that did not change, still has an maladaptive response after therapy therapeutic touch, this can be associated to prolong hospitalization of respondents who had reached four days, and at that time the respondents had experienced repetition of procedures infusion of more of 3 times within four days this is because too fussy so easily to apart and also because of fear of injury and body pains are too strong experienced by the child. This is consistent with what is stated by Hockenberry & Wilson (2007) which states that the psychosexual conflict in the group of preschoolers makes children extremely vulnerable to the threat of bodily harm. Fear of children against injury arises because children consider both measures and procedures that are painful or not, is a threat to the integrity of the body.

Benini, Trapanotto, Gobber, Agosto, Carli and Srigo (2004) suggested that children who have a fear of increased pain, demonstrating negative emotions, have limited speech, and revealed expression in reaction to a painful stimulus. Hamilton (2008) states that 10% of all children have a fear of needles, it causes children avoid health services. Furthermore Hockenberry & Wilson (2007) also mentions that the interruption procedure, pain or without pain is a threat to preschoolers, where the concept of the integrity of the body is still the least developed, while the development of body image evolved following the development of cognitive and language skills. Based on these conditions is generally fear of preschool children is more dominant than the other age period that cause increased stress in children.

This is consistent with the theory put forward by Hitchcock et al (1999) that touch therapy can enhance relaxation, reduce pain, reduce anxiety, accelerate wound healing, and contribute positively to the psychoimmunology change. So it can reduce stress levels in children in this research. According to research conducted by Kelly (2004), said that therapeutic touch help women with breast cancer in adapting to stress that the patient has decreased levels of stress.

Touch is an action that can produce a calming reaction so as to reduce stress levels. This is consistent with what is proposed by Fredriksson (1999) which states that touch is one approach that soothes where nurses can get closer to clients to provide care and support, the touch will bring nurses and clients into a relationship and create a sense of believe. Contact touches such as direct contact with the skin. Roy said that theoretical model of adaptation in the adaptation process experienced by a person starting from input. In this study input of therapeutic touch therapy is used as stimulus (Tomey&Alligood, 2006). Stimulus will affect the process of adaptation that is used as coping mechanism. Therapeutic touch can be used as a therapy for sick children during hospitalized.

According to Burr (2005) research said that the touch therapy very effective in treating patients in the trauma recovery process that lead to stress. Study by Burr (2005) supports the results obtained by the researchers that during the act of infusion respondents experienced severe stress evidenced prior to therapeutic touch therapy clients crying, refusing to infusion, calling his mother, angry. However, after the therapeutic touch therapy clients feel comfortable, seemed cooperative, stopped eating and drinking, re-open to the surrounding environment.

Based on the observation data obtained in the study in the intervention group obtained significant results when compared to the control group which was not given therapeutic touch intervention. This showed that in the group given intervention therapeutic touch showed a decrease in stress response hospitalization better than the control group who were not given the intervention therapeutic touch, which means the application of therapeutic touch have an influence more effectively to reduce the stress response of hospitalization in children of preschool age on the adaptive level.

Data results proved that after therapeutic touch therapy some respondents entirely transformed into adaptive response because based on the theory expressed by Kriger (1979) that therapeutic touch can reduce the level of anxiety (stress) and able to improve mood in patients who were treated at hospital.

The process of therapeutic touch involves tactile stimuli that starts from skin contact, first some free nerve endings can detect touch and pressure of therapeutic touch, both receptor and touched with high sensitivity, the

body Meissner which is overhung capsuled nerve endings of sensory nerve large myelinated (type A β). Inside the capsule there are many ramifications of this nerve. Body of filament terminal can be found on the skin of hairless and especially a lot of fingertip and body of Meissner filament adapt within perseconds after stimulated, which means that the receptor is particularly sensitive to the movement of the object on the surface of the skin, as well teradap low frequency vibration (Guyton & Hall, 2008).

Conclusions

The conclusions of this conducted research on the effect of nurse therapeutic touch therapy to the hospitalization stress of children aged 3-6 years who performed the infusion invasive procedure at the Adi Husada Hospital

1. Stress response on preschool children are crying, withdrawal, refusing to eat and drink, often called parents, scared, spoiled, apathetic, sad, aggressive, uncooperative, and always ask to stop treatment procedures.
2. Therapeutic touch therapy had significant effect on the hospitalization stress in children aged 3-6 years following delivery therapeutic touch therapy.

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THE CORRELATION BETWEEN THE KNOWLEDGE AND ANXIETY LEVEL OF LABOR PROCESS AT THE THIRD TRIMESTER OF PREGNANT WOMEN

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ABSTRACT

Introduction : A labor is a complicated and interplay of relationship between psychology, physiology and the influence of a labor encouragement in a maternal. The study aim to determine of the correlation between the knowledge and anxiety level of labor process at the third trimester of pregnant women. **Method**: This study was a non-experimental using *cross sectional* approach. The population were 56 primigravida at BPS Ny. Siti Rofi'atun Amd. Keb.Sambirejo. Jogoroto Jombang. The subject were 48 respondents. The sampling techniques were stratified random sampling. The were analyze using Spearman rank test. **Result**: The results showed of pregnant women who have a good knowledge of labor process was 60,4%. While for them who feel anxiety are 72,9 % or 35 respondents with significance value $\alpha < 0,05$. The correlation score of statistic test was $p = 0,013 < 0,05$ HI accepted. It meant that there is correlation. The result of spearman rank showed that there is correlation between the knowledge of labor process and anxiety level at pregnant women which is explained by significance level $p=0,013$.

Conclusion: There is correlation between the knowledge of labor process and anxiety level at primigravida (third trimester of pregnant women).

Keyword : *Knowledge, The Third Trimester Of Pregnant Women*

INTRODUCTION

Normal delivery is a process of is the process of the birth of fetus by mother's own strength, unassisted the tools as well as not to injure the mother and baby, which generally lasts less than 24 hours (Sri Hari.U,2009:1). Labor or delivery is a labor is a complicated and interplay of relationship between psychology, physiology and the influence of a labor encouragement in a maternal. The more advanced the field of science and increasingly severity demands of life, the human will face various changes and one of them is anxiety. It is an emotional reaction on life problem. Psychological disturbance is complex series of causality factors, they are organic, psychology, personality character, environmental and social factors (Kartono, 2003). Preliminary study was conducted on 10 pregnant women TMIII at BPS Ny. Siti Rofi'atun, sambirejo Jogoroto Jombang. The questioner result showed that 70 % they understood about labor process and feeling worried not to be ready to have labor process. However, 30% they did not feel worry to do the labor process.

METHOD

The research was held at BPS Siti Rofi'atun Sambirejo Jogoroto Jombang. The research design used was analytic with "cross sectional" approach. The population was all the pregnant women who checked their pregnancy at this BPS. The numbers of pregnant women were 54. The sample was taken by stratified random sampling

RESULT

The result and discussion based on questionnaire data. The questionnaire was about the correlation between the knowledge and anxiety level of labor process at the third trimester of pregnant women at BPS Ny. Siti Rofi'atun Amd. Keb.Sambirejo. Jogoroto Jombang

Table 1. The Correlation Between The Knowledge And Anxiety Level of Labor Process

Independent		The Correlation Between The Knowledge and Anxiety Level of Labor Process At							
		Mild Anxiety		Medium		Nothing		total	
Dependent		Σ	%	Σ	%	Σ	%	Σ	%
		Knowledge	Less	12	25	4	8	13	27
Enough	12		25	1	2	0	0	13	28
Good	5		10	1	2	0	0	6	12
Total	29		60	6	12	13	27	48	100

DISCUSSION

Based on the research showed that 19 respondents (39,6%) had less and enough knowledge while 29 respondents (60,4%) had a good knowledge. Both had mild and enough anxiety while 35 respondents, and 13 respondents had no anxiety. Spearman rank test showed that Significance score was $\alpha < 0,05$. Statistic test result showed that correlation score $p=0,013 < 0,05$

As a theory proposed by Rogers, the knowledge covered in cognitive 6 levels. (Notoadmojo, 2003) among which knows interpreted as considering the material that has been studied before, including into the knowledge of this level is recall (recall) of a specific of all, materials rooms have learned or received.

Corresponding the theory, presented by Notoatmodjo (2005) that the knowledge is the result of human understanding, simply answering questions. Knowledge has a specific goal, sampling methods and approaches to study such objects so as to obtain results that can be arranged in a systematic and universally recognized, then establishing into particular sciences. Therefore, person is not able to remember what received from outside the knowledge. They gained too little knowledge that people do not understand. Furthermore, it

causes anxiety in someone which cannot absorb the knowledge to the fullest.

According to Ayub Sani (2007) anxiety is brief emotional experience and a reasonable response, when individuals are confronted by pressure or events that threaten their lives.

CONCLUSION

29 respondents or (60,4%) of third trimester of pregnant women at BPS Ny Siti Rofi'atun, Amd. Keb sambirejo jogoroto jombang had a good knowledge. There is correlation between the knowledge and anxiety level of labor process at the third trimester of pregnant women.

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RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDE WITH COMMUNICATION OF NURSES IN INVASIVE NURSING ON SCHOOL AGE CHILDREN

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ABSTRACT

Background: Communication is a critical component to ensure the nurses do nursing competency in accordance with the applicable procedures, which may affect the safety of the client and the quality of services provided. The nursing team in pediatrics much more focused on doing the procedure, while the interaction with children and families tend to be short during the hospitalization. So it needs to be improved ability to communicate both verbal language and non-verbal skills of nurses who according to the data is still in the moderate category. **Objective:** The purpose of this study was to determine the correlation between knowledge and attitude of nurses with nurse communication in invasive nursing action on school-age children.

Method: This study using cross sectional and correlational analytic methods. The study was conducted in August-September 2014 with a sample of 44 respondents children and 28 respondents nurses, the sampling technique used was total sampling. Research using questionnaires measuring tool for knowledge, attitudes and assessments of children who have tested the validity and reliability. Data were analyzed using Chi Square.

Result: There was a significant relationship between the knowledge of nurses with nurse communication during an invasive nursing with value of count $\chi^2 11,499 >$ value of table $\chi^2 3.811$ with p value of 0.001. There was a significant relationship between the attitude of nurses with nurse communication during an invasive nursing with a value of count $\chi^2 14.049 >$ value of table $\chi^2 3.811$ with p value 0.000.

Conclusion: There was a relationship between knowledge and attitude of nurses with nurse communication during an invasive nursing school age children.

Keywords: Knowledge, Attitude, Communication Nurses, invasive nursing, School Age Children

INTRODUCTION

Communication is a critical component to ensure the nurses do nursing competency in accordance with the applicable procedures, which may affect the safety of clients and quality services provided. The nursing team in pediatrics much more focused on doing the procedure, while the interaction with children and families tend to be short during the hospitalization. A nurse only perform therapeutic communication during the interaction of 39.75 minutes in total for 8 hours (1 day hospitalization) and 2.24 minutes at each stage of interaction (Shin, 2005). Only 27.3% of the nurses who provide care plans and options are on offer to mothers with premature babies (Keenan, 2005). Research conducted by Fitriansari (2012) revealed that the level of satisfaction

of families whose children receive treatment in hospital approximately 52.2% of the nursing service room children. Therapeutic communication adopted by the nurses in this study amounted to 60.9% is positive. Research conducted by Hossain (2009) reveals that the knowledge and attitude of nurses to care management in a moderate position that is equal to 66.79%. Results of another study conducted by Nuralamsyah (2008) in the Hospital Dr.Sardjito qualitatively show that therapeutic communication nurse who performed during the treatment of children is not so good diruang of 6 nurses only two people who do a good therapeutic communication with the child.

So that needs to be improved the ability of nurses to communicate both verbal language and non-verbal skills of nurses who according

to the data is still in the moderate category. The purpose of this study was to determine the correlation between knowledge and attitude of nurses with nurse communication in nursing invasive action on school-age children.

MATERIALS AND METHODS

Research design used a cross sectional, measurement was directed to find out how the relationship of knowledge and attitude of nurses and nurse communication in nursing invasive action on school-age children as a dependent variable. The study was conducted in August-September 2014 with a sample of 44 respondents to the children and the 28 respondent nurses, the sampling technique used was total sampling. Research using questionnaires measuring tool for knowledge, attitudes and assessments of children who have been in the validity and reliability. Data were analyzed using Chi Square.

RESULTS

Research was conducted on school-age children and caregivers for children in the Nursery Islamic Hospital Siti Aisyah Madiun. Based on sample criteria and willingness of respondents obtained samples into the sample nurse respondents as many as 28 people and school-age children as many as 44 people. In this study nurses get the result that the characteristics of the largest distributed child at the age of 20-30 years amounted to 64.29% with the majority of nurses are female at 67.86%. The largest nursing education level education level D3 of 89.29% with 1-5 years of experience working majority of 60.71% and the majority of nurses at 53.57% never attended training on communication.

Based on the research that has been done showed the level of knowledge of good child care largely to communications made during the action invasive nurse as many as 22 people (78.57%) and that is enough only 6 people (21.43%) of all respondents that there in this research.

Nurses largely positive attitude towards communication during invasive measures as many as 16 people (57,14%) and the negative attitude there were 12 people (42.86%) of all respondents in this study. Children assess both the communications made during the action invasive nurse many as 22 people (78.57%) and the judge quite simply 6 people (21.43%) of all respondents in this study. Based on

observational data that have been made to the nurse communication during invasive measures as many as 21 people (75%) do a good communication and were quite 7 people (25%) of all respondents in this study.

Table 1 Cross tabulation knowledge and attitudes nurse with child assessment for nurses in doing invasive action in the nursery rsisitiaisahmadiun, date 5 august to 5 october 2014

Variable	Child assessment			Total	χ^2	P (V)	OR (95% CI)
	Good	Enough	h				
	n	%	n %				
	N	%	N %				
Knowledge							
of nurses	18	21	11	11	10,01	0,67	21,6
Good Enough	37	0,3	31	4	155,3	155,3	155,3
h	23	70	9	9	1,9	1,9	1,9
Attitude							
of nurses	20	18	11	11	0,00	35,00	35,00
Negative	47	26	10	0	4,291	4,291	4,291
Positive	5	5	0	9	0,9	0,9	0,9
Kids							
experience	15	85	0	0	43	0,1	0,61
Ever	16	3	2	6	0,6	80-	2,07
Never	6	3	4	2	0,6	2,07	7
Physical state							
Child	26	13	3	0	0,0	0,58	0,58
Low-Medium	43	37	0	3	62	0,9	0,9
Severe	39	1	1	3	3-3,65	3,65	3,65
	42	7	0	7	0	0	0
	9	1					

Based on Table 1 showed that the nurse's knowledge about communication during nursing invasive action on both child will affect the assessment of the child's communication. Results that nurses attitude about communication during invasive nursing in children was also well worth a positive assessment of the child's communication made nurses during nursing invasive action.

In table 1 the results obtained p value <0.05 was good on the knowledge and attitude of nurses about communication during invasive action of nursing, which means there was a significant relationship between knowledge and attitude of nurses about the communication to the communications made by nurses for nursing in the invasive action view of the assessment of children who deal directly with the nurse. The relationship between knowledge and attitude of the nurses was positive which means the better the knowledge of nurses and nurse communication more positive attitude better nurse communication.

DISCUSSION

Communication nurse a child until now action still the focus of the nursing child. By the time children enter the hospital they were afraid the hospital and some of them do not want to be invited to work together. It's that require nurses to optimize communication with clients (children).

Results of research conducted revealed that the nurse's knowledge children have a good level this can be supported also by the level of education of nurses were mostly already D3 where high educational level will show aspects of counseling a better ability to communicate during interaction with clients. It is also according to research conducted by Kounenou, Aikaterini and Georgia (2011) which states that nursing education through post-graduate studies, seminars and training makes nurses acquire special knowledge which in turn helps them to understand the behavior of patients resulting in the ability of nurses more both in communicating with patients.

Greenberg & Schultz (2002) identified that there were three high-risk populations in nursing practice, one of which was children who are included, so it's recommended to nurses who work with high-risk populations to

develop communication skills to manage the practice of child clients nursing. Remember was a unique individual, in therapeutic communication with clients child takes quite a different technique.

The shipper must send the message effectively to the receiver message so that it can interpret or translate the message appropriately, if the recipient does not dapatuntuk receive, misinterpretation, or not meresponesan it can be said defective communication (Stone et al., 1999, in Grover, 2005). One important thing to note is the perception communicant of the message should be the same as the perception of communicators who message. Clear communication strategy is essential for optimal results (Grover, 2005).

There are three things that characterize the client communications, among others: Genuineness (sincerity), Empathy (empathy) and Warmth (warmth). Communications nurse-client characterized by effective information exchange and positive impact can lead to greater confidence and willingness clients more likely to follow up on the commitment to treatment, which in turn can affect the survival of the client (Glanz, 2008).

A nurse and client generally wants relations characterized by mutual trust, involvement, respect, and deal with each other in accordance with the role in the relationship that has been agreed (Fuertes, 2007 in Glanz 2008). Showing respect and involvement are made orally, by expressing an interest in the views of others and nonverbally condition, through eye contact and facial expressions of concern.

Fulbrook, et.al (2011) states that the knowledge, skills and competencies of nurses is essential to ensure quality nursing care to clients who do fosterage. Application of knowledge of an information and intelligence level of nurses is a hallmark of professional nursing preparation in the implementation of nursing care in the area, where there must be a match between the needs of clients with the skills, knowledge and attributes of nursing care provided to clients.

CONCLUSIONS

There were a relationship between the level of knowledge and attitude of nurses about the communication with the communication of nurses for nursing invasive action with the

assessment of school-age children were hospitalized. Communication is done nurses could be one indicator in an effort to increase nursing services in meeting the accreditation standards of hospital services and can be used as input for the institution as well as the evaluation of nursing care in providing nursing care and comprehensive client children and families

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THE INTEGRATION OF FAMILY CENTRED NURSING AND TANNAHIL'S MODEL TOWARD FAMILY'S ABILITIES TO CONTROL TEENAGERS' RISKY SEXUAL BEHAVIORS IN BANGKALAN

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ABSTRACT

Introduction:Risky sexual deviations (paraphilias) are heterosexual vaginal coitus with partners who do not want pregnancy and who do not use contraceptive methods without marital status. Nowadays, prevalence increasingly rises and result in worrying effects. This research was aimed to prove the effects of integration of family centered nursing and Tannahil's model on family's abilities to control teenagers' risky behaviors.**Method:**This research used a quasy experiment, control group pretest-posttest design. Research subject was the parents who had 10th and 11th grade-teenagers having lovers and having been invited to consoling teachers due to their behaviors, in SMA in Bangkalan. Sample consisted of 45 experiment group and 45 control group. Sample used purposive sampling technique.**Result:**The result indicated that there was difference of before and after treatment with value of family's abilities ($p=0,00$), teenagers' self control ($p=0,00$), knowledge ($p=0,00$), teenagers' activities ($p=0,00$), searching patterns of information access ($p=0,04$), and success commitment for group behaviors ($p=0,003$).**Conclusion:** It meant that there were effects of integration of family centered nursing and Tannahil's model on family's abilities to control teenagers' risky behaviors.It is suggested that public health center establish partnership program among nurses, families and teenagers to create comfortable environment full of protection for teenagers so that the teenagers will not make outside environment to look for solutions.

Key Words: *integration, FCN &Tannahil's model, family's abilities, self control, knowledge, activity,information access, success commitment*

INSTRUCTION

Teenagers are at transitional period between childhood and adulthood. In 2010, the Health Minister of Indonesian Republic defined teen ages between 10 and 19 years and unmarried. Compared with other group age, teenagers have uniqueness in physical, psychological and social growth and development which are fast. Adolescence is a period full of shocks and stress so problems teenagers undergo look very complicated and for family it is the most difficult period. Recently, teenagers are frequently involved in social problems by committing high risk actions which threaten physical and mental health, that is, deviant sex behaviors (Monks, 2009).

In family and society with values, sexual relationship is ruled with religious, social, and moral norms to prevent deviations. For

Indonesian people, deviant sex behaviors such as premarital sex intercourse and sex relationship in public places are considered as unacceptable actions either socially or culturally. However, the young tends to be tolerant to this (Suryoputro. at all, 2007). Sex behaviors are deviant because they are against social norms about marriage in Indonesia. If norms are disobeyed, they have consequences in society (Narwoko, 2007).

Madurese people who are well-known for their religious identities consider sexual intercourse as something holy and having value of honor, teenagers' abilities at maintaining self control and also consider sexual activities as something sacral and it can be done under marriage binding. Sex as human gift in men and women has to be managed as well as possible. Sex behaviors which are against religious norms and social values are deviant

actions and categorized as big sins, and are considered reprehensible actions which can result in very bad effects on good names of big family. Deviant sex behaviors are considered big sins for family and relatives (Mustopa at all, 1982, Affandi, 1988) and considered to result in disasters in places where people live so they condemn those actions.

Madurese teenagers, as others, need to have abilities at decision making as part of life skills (BKKBN, 2010) and have strong self concept so that they can prevent bad social effects which can bring about deviant sex behaviors. The population number of Indonesian teenagers is sufficiently big, 64 millions or 27% of Indonesian population (Depkes, 2011). The bigger, the population number of teenagers, the more the problems teenagers undergo in relation to growth and development periods. Modernization, globalization in technology and information, and other aspects also influence changes of teenagers' life behaviors which in turn influence their life behaviors of reproductive health and teenagers are easily trapped in deviant sex behaviors. Teenagers' sex behaviors, in fact, are both in big cities and in small cities as well as in rural areas. Incidence of deviant sex behaviors in Madura, which is well-known for strong religious life, was an indication of failure in preventive patterns. Data of sexual actions as part of teen deviant sex behaviors from Polres Wilayah Madura (Madura Police Resorts) can be seen in the following table 1.3

Table 1. Incidence of Teenagers' Sexual Cases in Madura 2010-2014

Years	Regency			
	Bna	Sampang	Pamekasan	Sumenep
2010	9	20	17	19
2011	11	24	32	33
2012	7	7	27	39
2013	16	17	30	11
2014	20	10	30	17

Data : PPA PolresBangkalan, Sampang, Pamekasan, Sumenep

Teenagers' sexual cases including sexual harassment and free sex in Madura rose. Data obtained from 4 polres in Madura were forms of administrative small reports. Cases of deviant sex behaviors in teenagers were like phenomena of icebergs visible on surface. From January to May 2015, in PolresPamekasan 40 teen sexual cases were recorded (Radar Madura, 2015).

Pre-research on 127 high school students (SMA) in Bangkalan showed that 70% had boyfriends/girlfriend and 40 students (31%) conducted sexual relationship such as kissing, grasping, caressing, hand holding, sexual expressions, self sexual action and couple sexual action but not intercourse. Of deviant sexual behaviors, 82% was carried out with boy/girlfriends or fiancé. Radar Madura (JawaPos Group, 2015) wrote news dealing with incidence of raping, 4 teenagers aged 15-16 years raped an eleven year old girl under the authority of PolresSampang. In relation to height of cases of teenagers' deviant sex behaviors, it was necessary to carry out preventive efforts effectively in family and teenagers directly.

Many factors contribute to teenagers' deviant sexual behaviors. Research of Musthofa&Winarti explained permissive attitudes toward sex, self efficacy, sex, ages, media access, and parents' control influenced premarital sex behaviors. Factors and access to pornography media, close friends' attitudes, and close friends' sex behaviors significantly influenced premarital sex behaviors risky of unwanted pregnancy (Azinar, 2013). Usage of health facilities as prevention of premarital sex behaviors in teenagers was stated in Lucin' research (2012). Frankel's research (2012) explained intention to conduct premarital intercourse was determined by sex, parents' presence, and environment disorders. Factors which influenced teenagers' attitudes toward sex behaviors were those of environment and social culture (Azwar, 2011). As globalization of information and technology goes and develops, very big changes occur in sexual norms especially in teenagers.

Friedman's model of Family Centered Nursing (2003) was a strategy of controlling and preventing teenagers' deviant sex behaviors. Practice of family centered nursing is based on perspective that family is a basic unit for individual nursing from family members and from broader unit. It can be seen in Susanto's research that explained the giving of family therapy, that is, health education, accompaniment and counseling in family skill development in effective communication for increasing family independence of teenager problems. Research of Sjattar at all (2011) proved that applying of family model for family which was an integration of concept of family centered nursing and self care

influenced family independence in caring sick family members.

To optimize preventive efforts for teenagers' deviant sex behaviors, model of health promotion can be used. Health promotion consisted of efforts for increasing health levels and reducing risks of catching diseases through health education, prevention, and health protection (Downie, Fife and Tannahill, 1990). One of health promotion models which can be used as theoretical framework for above problems was Tannahill' model. All nursing aspects including effects of family culture could play a role in strengthening family functions for maintaining health of family members, that is, family's convince about health definition and disease causes (Ball & Bindler, 2008). The aim of this research was to prove the effects of integration of family centered nursing and Tannahil's Model on family's abilities of controlling teenagers' risky sex behaviors

RESEARCH METHOD

This research used a queasy experiment, control group pretest-posttest design. Objects of research were responsible persons who had 10th and 11th grade teenagers already having boy/girlfriends and once having been invited by BK teachers due to pacaran behaviors, at SMA Bangkalan from July to December 2014. Sample which used purposive sampling technique was composed of 45 respondents of experiment group and 45 respondents of control group. Intervention/treatment was carried out by providing teenagers with sexual modules and finding out their future effects. Families were given guidance for 6 months and were visited every four weeks. Independent variable was integration of family centered nursing and Tannahil's Model and dependent variable was family's abilities at controlling teenagers' risky sex behaviors. Data collection technique used questionnaires. Instrument for family ability used format for self-evaluation on family cognitive ability, family knowledge of controlling teenagers' sex behaviors and psychomotor skills of controlling teenagers' sex behaviors. Filling in questionnaires was conducted through direct interviews by trained team. This research assessed family's abilities of controlling teenagers' sex behaviors before and after treatment. Paired test was used to analyze effects of integration of family centered

nursing and Tannahil's Model between control group and experiment group. Independent t-test was used to find out effects of integration of family centered nursing and Tannahil's Model on family abilities at controlling teenagers' sex behaviors in Bangkalan Madura. This research applied ethical principles (autonomy, beneficence, maleficence and justice).

RESULTS

Characteristics of Respondents

Characteristics of respondents showed that control group and experiment group had homogeneity. Test results of homogeneity between control group and experiment group were as follows: characteristics of sex = 0.222, education = 0.455, age = 0.857, occupation = 0.766, income = 0.322, parent-child relationship = 0.406 and family structure = 0.114 all of which was bigger than 0.05. It means both control group and experiment group had the same variation (table.3).

Level of Family's Abilities of Controlling Teenagers' Family's Abilities of Controlling Teenagers' Deviant Sex Behaviors Sex Behaviors

Based on table 3, there was a change of category in experiment group, before treatment 46.70 family had poor ability and after treatment 46.70 family had good ability.

Differences in Mean/Averages of Family's Abilities of Controlling Teenagers' Sex Behaviors

Table.4 Mean Differences in Levels of Family's Abilities of Controlling Teenagers' Sex Behaviors

N	Controlling Ability	Mean		Mean Difference
		Pre	Post	
1	Controlling Ability of Experiment Group	20.9	30.4	9.50
2	Controlling Ability of Control Group	27.2	27.5	0.30

Based on table 4, there was a mean difference in scores of family's abilities of controlling teenagers' sex behaviors, 9.50. In control group, there was a change but not significant, 0.30. of category in experiment group, before treatment 46.70 family had poor ability and after treatment 46.70 family had good ability.

Differences in Family's Abilities of Controlling Teenagers' Sex Behaviors Before and After Treatment

Table 5. Differences in Levels of Family's Abilities of Controlling Teenagers' Sex Behaviors

No	Group	Family's Controlling Ability	t Value	p Value
1	Experiment	Pre test Post test	- 8.087	0.000
2	Control	Pre test Post test	- 1.874	0.085

Based on table 5, paired t test of experiment group showed that t value, 8.087 and p value = 0.000 smaller than $\alpha = 0.05$ meant there were differences in family's abilities of controlling teenagers' sex behaviors in Bangkalan after the giving of an integration of family centered nursing and Tannahil's model. Negative t value indicated that family's abilities of controlling teenagers' sex behaviors before treatment was lower than that after treatment. In control group, t value 1.874 and p value = 0,085 higher than $\alpha = 0,05$ meant there were no differences in in family's abilities of controlling teenagers' sex behaviors before and after treatment.

Effects of Integration of Family Centered Nursing and Tannahil's Model on Family's Abilities at Controlling Teenagers' Sex Behaviors

Table. 6 Differences in Family's Abilities of Controlling Teenagers' Sex Behaviors

No	Variable	T	P
1	Family's controlling abilities in	7.840	0.000

experiment group	
2	Family's controlling abilities in experiment group

In table 6 the result of independent t test showed that in variable, family's abilities of controlling teenagers' sex behaviors, p value = 0.000 smaller than $\alpha = 0.05$ meant there were effects of integration of family centered nursing and Tannahil's Model on family's abilities at controlling teenagers' risky sex behaviors.

DISCUSSION

The result of research showed that there was an increase of family's ability of controlling teenagers' sex behaviors. Before treatment in experiment group, family's ability of controlling teenagers' sex behaviors was categorized *good*, 0% but after treatment, 46.70% was categorized *good* and family's ability of controlling teenagers' sex behaviors was categorized *poor*, 46.70% but after treatment, 6.60% was categorized *poor*. In control group, an increase of family's ability of controlling teenagers' sex behaviors was not significant. Mean differences in experiment group before and after treatment were 9.50 and in control group, 0.30. Test of effects of integration of family centered nursing and Tannahil's Model on family's abilities of controlling teenagers' sex behaviors was significant.

In religious context, Madurese people are well-known for strongly holding Islamic teachings in their life patterns although there are contradictions in formal and substantive Islamic teachings and socio-cultural behavior patterns and their practice of religious life. Confession that Islam is convinced belief for Madurese ethnics does not always describe relevance with their attitudes, principles and patterns of behaviors (Mahmudsyah, 2015). It can be seen in the fact many families did not pay attention very much to how to care children in youth development in order not to be involved in sex behaviors potentially resulting in health problems. It was known that before treatment of an integration of family centered nursing and Tannahil's Model, 46.70% of family's ability of controlling teenagers' sex behaviors was categorized *poor*.

It could be understood that there was a contradiction between cultural binding and understanding of religion.

Culture of speeding teenagers' engagement in Madurese ethnics was one of the triggers of high incidence of deviant sex behaviors in Bangkalan Madura. Some Madurese families thought that to prevent child's contact with someone without clear binding, and to prevent daughter from being old virgins, engagement is considered as parents' control on children. Underage engagement causes teenagers to have dating partners. According to Hyde (2007), teenagers who had earlier/faster dating than those of their age were possible to have permissive attitudes towards free sex relation. Such principle should be corrected because it raised various problems for teenagers, including health problems. Families need education suitable for family's characters.

De Dauza and Gualda (2000) explained that family played a role as a stepping point to study health behaviors and basic definition for healthy and ill. Families could influence individual perceptions. Patricia (2011) recommended that treatment of family nursing by paying attention to family could improve individual's and family's abilities to overcome problems they underwent by paying available family resources.

Nursing treatment such as the giving of education, prevention and specific protection could increase levels of family's abilities. Data showed that there was an increase of average/mean of family's ability of controlling teenagers' sex behaviors, 9.50. With treatment of integration of family centered nursing and Tannahil's Model, nurses could carry out various approaches to prevent incidence of teenagers' health problems due to their wrong behaviors. Practice of family centered nursing was based on perspectives that family is a basic unit for individual nursing from family members and from broader unit. Family is a basic unit from community and society, presents differences in culture, tribe, ethnics and social economy. Implementation of this theory included considering other factors, sociality, economy and culture during conducting of research, planning, implementation and evaluation of nursing in children and families ((Hitchcock, Schubert, Thomas, 1999) so that it eased nurses to give care.

Efforts to strengthen family's controlling sex behaviors, if left untreated, resulting in risks of health disorders, can be carried out through health education, health protection and prevention. Nurses can combine activities of health education, health protection and prevention, and consequences of disease due to sex behaviors in families with children in youth development (Tannahill, 1990). Socially, families have an important role as supporting resource for teenagers. Parents played a positive role in giving social support and motivation and could increase healthy group interaction (Pender, 2002). Parents also played a role in internalizing values suitable for teenagers so that they could participate effectively in society. Communication patterns in family needed to be learnt because deviant risky sex behaviors could be caused by ineffective communication patterns in family, existing values or culture.

Treatment of integration of family centered nursing and Tannahil's model made nurses possible to help family focus on relationship and internal dynamic of family, function, family structure and subsystem relationship of family with whole family and family relationship with environment/neighborhood. This concept was in line with that of family nursing used in perspective of disease interaction and family members so it could be used as base of giving intervention (Wright & Leahey, 2000). Consequently, nurses and families can carry out prevention and protection for teenagers through education based on Tannahil's concepts.

CONCLUSION AND SUGGESTION

Research conclusion : 1) there was an increase of families' abilities of controlling teenagers' sex behaviors before and after treatment; 2) families who were not given integration of family centered nursing and Tannahil's model did not show an increase of abilities of controlling teenagers' sex behaviors and 3) the giving of treatment of integration of family centered nursing and Tannahil's model influenced the increase of abilities of controlling teenagers' sex behaviors in Bangkalan Madura.

Suggestion: 1) Intervention of integration of family centered nursing and Tannahil's model can be used to increase families' abilities of controlling teenagers' sex behaviors; 2) it necessary to improve understanding on

approach of nursing intervention in preventing risky behaviors potentially resulting in health problems; and 3) puskesmas (public health center) need to establish partnership programs of nurses families and teenagers to create convenient environment full of protection for teenagers so that teenagers do not make outside environment as a place for seeking solutions. Teenagers need to be protected from risky behaviors which cause occurrence of diseases especially disorders of reproductive health.

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INFLUENCE BEHAVIOR THERAPY (MODELLING TECHNIQUE AND ECONOMIC TOKEN) TO FREQUENCY OF ENURESIS IN PRE SCHOOL CHILDREN

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ABSTRACT

Enuresis urinary problems are often found in childhood and cause concern for patients and their families. The prevalence of enuresis in boys around 2.83% and 2.97% girls, of which 82.4 % were classified as nocturnal enuresis and diurnal enuresis classified 17.60 % , 96.70 % are primary and only 3.30% secondary enuresis . Results of a preliminary study on 10 children aged 4-6 years in Sejati, Camplong, Sampang found that 60% of children aged 4-6 years experience enuresis. This study is an experimental pre-One Group Pretest-Posttest Design. Collecting data using pre and post observations. Data was taken on the majority of children who have enuresis in Sejati, Camplong, Sampang. The results were analyzed using descriptive and correlation parametric test Paired T-Test. Frequency of enuresis in sample before behavioral therapy (token economy and modeling techniques) an average of 3 times a day and the frequency of enuresis after intervention 1 times a day. Analysis of parametric test Paired T -Test : p-value of 0.000 (<0.05) means that the null hypothesis is rejected means there is influence behavior therapy (modeling techniques and token economy) to decrease the frequency of enuresis (p = 0.008). To further research the authors suggest that continued follow-up study with some preparations include a clear and practical education to the respondent, the procurement of more stringent environmental controls, manufacture of detectors urinate more flexible, so that it can be better

Keyword: *Behavior Therapy, Modeling Techniques, Token Economy, enuresis*

THE EFFECT OF IRON TABLETS WITH SWEET ORANGE JUICE CONSUMPTION TO INCREASE HEMOGLOBIN LEVELS OF PREGNANT WOMENS

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ABSTRACT

Introduction: The incidence of high risk pregnant women suffering from anemia is still very high, especially in the area of health centers Peterongan Jombang. The data indicates nearly 50% of pregnant women suffer from anemia. It required special interventions to reduce the incidence of anemia. The purpose of this study was to prove the effect of consumption of iron tablets with sweet orange juice to increase hemoglobin levels of pregnant women Peterongan District of Jombang. **Methods:** Designs in this study quasy Experimental pretest - posttes, A sample of 20 pregnant women who fit the criteria of inclusion and exclusion. Sampling technique used was stratified random sampling, the independent variable in this study is the consumption of iron tablets with sweet orange juice and the dependent variable in this study was the increase in hemoglobin concentration. Iron tablets given Ferus Sulfate 200 mg single dose and sweetorange juice 1 piece every day for 3 months and hemoglobin are measured using shahlihemoglobin. The statistical test used was paired T-test. **Result:** Results showed an increase in hemoglobin levels after treatment with $p = 0.035$. **Discussion:** Iron tablets cause discomfort, nausea in pregnant women so that pregnant women may be reluctant to drink, and to be given the sweet juice made fresh flavor and oranges contain vitamin C which serves to facilitate the absorption of iron. It is strongly advised to health workers, especially midwives to provide counseling utilization of sweet oranges when pregnant women drink Fe for the prevention of anemia in pregnancy.

Keywords: *Iron tablets, Sweet Orange Juice, hemoglobin, Pregnancy*

THE DIFFERENCES AND EFFECTIVENESS OF PARTURITION GYMNASTICS IN EARLY MOBILIZATION OF UTERINE INVOLUTION

Devi Endah Saraswati

ABSTRACT

Background:One of the complications of parturition is an involution process that is not running properly which can cause bleeding and death effect of mother. Uterine involution velocity depends on the mother age, number of children born, exclusive breastfeeding, early mobilization, parturition gymnastics, and early lactation

Objective:To distinguish the effectiveness of parturition gymnastics and early mobilization toward uterine involution.

Methods:The study was Quasy experimental. Subjects were primiparous parturition women with spontaneous birth 20-35 years old in the Regional Health Center of Bojonegoro. Subjects were divided into two groups: group I (n = 18) with parturition gymnastics intervention and II (n = 18) with early mobilization intervention. The analyses used in this study were the chi square test and logistic regression.

Results:Results of chi square test obtained parturition gymnastics group with normal uterine involution = 14 (77,8%) and early mobilization group with normal uterine involution = 6 (33,3%), p value = 0,019, RO (95% CI) = 2.3 (1,2-4,7). The results of logistic regression simultaneously the same variables and exclusive breastfeeding intervention group effect on uterine involution with p value < 0.001, effect of 42,0% and 72,2% accuracy. The test results separately showed that the variables of intervention group with p value = 0,019 RR (95% CI) = 8,6 (1,4-51,9) and exclusive breastfeeding variables with p value = 0,009 RR (95% CI) = 10,8 (1,8-65,1)

Conclusion:Parturition gymnastics are more effective toward normal uterine involution process than early mobilization, so it can be used as a mandatory parturition gymnastics program in parturition care.

Keywords : *uterine involution, parturition gymnastics, early mobilization, differences in effectiveness*

COOKING CLASS ACTIVITY IMPROVES FINE MOTOR DEVELOPMENT OF PRESCHOOL CHILDREN

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ABSTRACT

Introduction: Fine motor development is very important for children because it will effect motor skills for their hands, movement of the limbs associated with the movement of the fingers as a child's preparation to write, draw and manipulate objects. If it is not fixed soon, it will effect the personality of the child. Cooking class activity uses cookie dough as a medium of playing so that the children will be trained in using of their limbs, especially fingers. The purpose of this study was to explain the effect of cooking class activity to increase fine motor development of preschool children. **Method:** This study was a quasy experiment pre test – post test control group design. The samples were obtained by using purposive sampling. This study held in Kindergarten 'AisyiyahBustanulAthfal 1 KertosonoNganjuk and the samples were 15 respondents divided into two group, treatment and control. The independent variable was the cooking class activity and the dependent variabel was fine motor development of preschool children, examined with Denver II test. Data was analysed by using wilcoxon signed rank test and mannwhitney u test with significance $\alpha = 0.05$. **Result:** The result of this study showed that the treatment group significantly increase in fine motor development with $p = 0.008$, while the control group had no significant increasing fine motor development with $p = 0.083$ and mannwhitney u test showed $p = 0.013$. **Conclusion:** It can be concluded that cooking class activity effect the increasing of the fine motor development of pre school children. So, it is suggested to parent, schools, and teachers to use this activity to improve the fine motor development of children.

Keyword: cooking class, development, fine motor, preschool children

MOZART MUSIC THERAPY TO REDUCE PAIN IN PATIENTS OF POST OPERATIVE *SECTIO CAESAREA* WITH ANESTHESIA SAB (SUB ARACHNOID BLOCK) IN SHOFA 2 RSU HAJI SURABAYA

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ABSTRACT

Introduction: Pain of postoperative *Sectio Caesarea* is a pain from surgery to deliver the fetus by opening the abdominal wall and the wall of the uterus. The effects can make a mother not do her daily activities as soon as the normal giving one. Mozart's music can be used as a therapy because it has a tempo about 60 beats per minute which is relaxing. This music can give neuroendocrine effects that are useful for patients. According to experts, music can distract patients from pain. Music is played to the patients by earphone. The purpose of this study is to determine the effect of Mozart's music to decrease postoperative pain in patients with *sectio caesarea* surgery by anesthesia SAB (Sub-arachnoid block) in Shofa 2 RSU Haji Surabaya. **Method:** The design is a quasi-experimental with pre-post control group design. The population in this study is all patients with postoperative *sectio caesarea* from 12 December to 12 January 2012 in ward Shofa 2 RSU Haji Surabaya. The technical sampling is purposive sampling with 14 respondents appropriate with criteria included. The independent variable is music therapy titled Mozart Clarinet Concerto (K.622) and the dependent variable is a pain scale according to Bourbonais. Technical of gathering data is observation. The data analysis is performed by Wilcoxon and Mann-Whitney test. **Result:** The result of Wilcoxon test on the level of pain in the treated group shows $p = 0.014 < 0.05$ and the control group $p = 0.317 > 0.05$. The result of Mann-Whitney test shows there are differences in results between controlled group and treated group with $p = 0.037 < 0.05$. **Discussion:** The conclusion of this research is Mozart's music therapy can reduce postoperative pain in patients with *sectio caesarea* surgery by anesthesia SAB (Sub-arachnoid block) in Shofa 2 RSU Haji Surabaya.

Keywords: *pain, Sectio Caesarea, Mozart's music*

MATERNAL MOTIVATION FOR COMPLETING THE IMMUNIZATION STATUS FOR CHILDREN BASED ON THE INTEGRATION OF THE BASIC MODEL OF LAWRENCE GREEN AND MC.CLELLAND

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ABSTRACT

Introduction: Immunization is the primary preventive program in order to reduce infant mortality. Basic immunization for children are BCG, DPT-HB, Hepatitis B, polio and measles. Immunization coverage rates in the Gumeno Village didn't reach target *Universal Child Immunization* (UCI). The purpose of this study was to analyze the effect of predisposing factors : knowledge, attitude, belief, and culture with maternal motivation for completing the immunization status for children. **Methods:** Design used in this study was descriptive analytic with cross sectional approach. The population were mothers who have children at Posyandu toddlers Post 1 (RT 1-5) Gumeno Village Gresik city. Total sampel were 40 respondents who met inclusion criteria. The independent variabels were predisposing factors : knowledge, attitude, belief, and culture. The dependent variabel was maternal motivation for completing the immunization status for children. Data were collected by using structured questionnaire. Data were then analyzed by using correlation Sperman Rho with significance level of $\alpha = 0,05$. **Result:** Result showed that mother's knowledge has correlation with maternal motivation for completing the immunization status for children ($p = 0,041$ and $r = 0,324$), mother's attitude has correlation with maternal motivation for completing the immunization status for children ($p = 0,031$ and $r = 0,342$), belief has correlation with maternal motivation for completing the immunization status for children ($p = 0,001$ and $r = 0,489$), and culture in the Gumeno village has correlation with maternal motivation for completing the immunization status for children ($p = 0,008$ and $r = 0,414$). **Discussion:** It can be concluded that predisposing factors : knowledge, attitude, belief, and culture have correlation with maternal motivation for completing the immunization status for children. Further research needs related to maternal motivation for completing the immunization status for children with completeness of immunization status for children.

Keywords : *Immunization, motivation, predisposing factors*

POST DATE PREGNANCY IN COLERATION WITH ASPHYXIA CASE IN NEWBORN BABY

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ABSTRACT

Introduction: Post date Pregnancy is when the period of babies gestation more than 42 weeks or more without attention to their birth weight so that the placenta is not able to provide nutrients and CO₂ / O₂ transportation which can cause the fetus at risk of asphyxia and foetal death. The purpose of this study to determine the relation of post date pregnancy with asphyxia case in newborn baby in Obstetric room of RSUD Jombang 2008 and the study was conducted in June 2009. **Methods:** This study used a descriptive analytic cross sectional approach. The population is all labor mothers with post date pregnancy. Sampling was done by *Random Sampling technique*. The independent variable is post date pregnancy, and dependent variable is newborn baby with asphyxia. Data were analyzed using cross tabulation test using *Chi Square* with significance level of 5%. **Results:** There was a relation between post date pregnancy with asphyxia case in newborns in hospitals Jombang with $\geq X^2$ count value table ($4.29 \geq 3.84$). **Conclusion:** Thus as professional health workers tend to be active by encouraging at every pregnant woman checkups early and regularly so that the risk of pregnancy problems can be detected early.

Keyword : *post date pregnancy, asphyxia, new born baby*

INTRODUCTION

Post date pregnancy is pregnancy that beyond the age of 292 days (42 weeks) gestation with symptom many possibility of complications, another name for postdate pregnancy is serotinus prolonged pregnancy or post-term pregnancy (dr I A, Chandranita Manuaba SpOG, 2008).

Infant Mortality Rate (IMR) based on demographic and health survey Indonesia (IDHS) in 2002 was 59 per 1,000 live births decreased to 35 per 1,000 in 2005, while the targets based on indicators of Healthy Indonesia 2010 amounted to 33/1000 live births and the 2015 (Millennium Development Goal / MDG) of 23 per 1,000 live births. The cause of neonatal mortality highest age group of 0-7 days is premature and low birth weight (LBW) (35%) and birth asphyxia (33.6%) the cause of neonatal mortality highest age group of 8-20 days is an infection of 57.1% (including tetanus, sepsis, pneumonia, diarrhea) and then feeding problems (14.3%) (MOH, 2006).

In East Java, according to the Central Statistics Agency recorded the Maternal Mortality Rate (MMR) has declined from 334 per 100,000 live births in 1997 to 262 per

100,000 in 2005 while the infant mortality rate (IMR) has declined from 44.64 per 1,000 births life in 2002-2003 became 35.32 per 1,000 in 2005-2006.

Post date pregnancy is pregnancy that beyond the age of 292 days (42 weeks) gestation with symptom many possibility of complications, another name for postdate pregnancy is serotinus prolonged pregnancy or post-term pregnancy (dr I A, Chandranita Manuaba SpOG, 2008).

The problem for this postdate pregnancy is when the placenta is not able to provide nutrients and CO₂ / O₂ transportation that make the fetus is at risk of asphyxia and foetal death. Possibility of mortality risk in postdate pregnancy can be three times as compared to term pregnancies, other complications that may occur is: the location of the deflection, the occiput posterior position, shoulder dystocia and postpartum hemorrhage. In postdate pregnancy should get special attention well so the end result of this pregnancy is well born baby and mother health can be achieved (Yulianti Devi, 2007).

The most important thing in dealing with postdate pregnancy to determine the state of the fetus because any delay would pose a risk. With

conservative attitudes risk of perinatal death ranges from 0.22%, while experiencing the risk of asphyxia 33% so it tends to be active after determining the state of the fetus and thus do not find on perinatal mortality (Prawirohardjo, 2005).

Research purposes

1. Identify the incidence of post date pregnancy.
2. Identify asphyxia case in newborns baby.
3. Analyze the relationship between gestational age post-date with asphyxia case in newborns baby.

RESEARCH METHODS

Research design

In this study, the study design used is descriptive method Analytical approach "*Cross Sectional*".

Population, Sample, Sampling

The population in this study were all women giving birth in Obstetrics Room of RSUD Jombang in 2008. The sample used most women giving birth in Obstetrics Room of RSUD Jombang samples that meet the criteria. Sampling design used in this study is the *Probability Sampling. Simple Random Sampling* technique.

Sample criteria

1. Mothers who gave birth with postdate pregnancy in Obstetrics Room of RSUD Jombang
2. Mothers who gave birth with aterm pregnancy in Obstetrics Room of RSUD Jombang

Variables identification

1. The independent variables in this study is postdate pregnancy. Mothers whose pregnancies over 42 weeks (post date), and mothers whose pregnancies 38-42 weeks (term), based on the first day of the last menstrual period recorded in the medical record. Tools: checklist. Criteria: Pregnancy at term (2) & Pregnancy post date (1). Nominal scale.
2. The dependent variable in this study were newborn baby with asphyxia case. Babies who are not able to breathe spontaneously and regularly after the cord is cut recorded in the medical record. Tools: checklist. Criteria:

Asphyxia (1) & Not asphyxia (2).
Nominal scale.

Location and Time Research

The location of research conducted in Obstetrics Room of RSUD Jombang. When the study will be carried out between the months of February to June, 2009.

Data Collection and Data Analysis

Data collection in studies using secondary data is data that is retrieved from the data in the medical record in Obstetrics Room of RSUD Jombang.

To determine the relationship between postdate pregnancy with asphyxia case in newborns, then the two variables tested using statistical test Chi Square. With the 5% significance and criteria, aterm pregnancies: 1, post date pregnancy: 2 then connect the dependent variable with asphyxia assessment criteria: 1, not asphyxia: 2. If $X^2_{count} \geq X^2_{table}$ then H_0 rejected and H_1 accepted meaning there is a relationship between age post pregnancy date with asphyxia in newborns. If $X^2_{count} < X^2_{table}$ then H_0 accepted and H_1 rejected meaning there is no relationship between postdate pregnancy-date with asphyxia.

RESULT RESEARCH AND DISCUSSION

Table 1. Distribution of Postdate Pregnancy based on it gestation period in Obstetrics Room of RSUD Jombang 2008.

No.	Gestation period	Frequency	Prosentase (%)
1.	Aterm pregnancy	16	31,37
2.	Post date pregnancy	35	68,63
Total		51	100

Source : secondary data based on egister medical record n 2008.

According to table above there are 35 (68,63%) postdate pregnancy.

Table 2. Distribution Asphyxia cases in newborn baby based on their APGAR Score in Obstetrics Room of RSUD Jombang 2008.

No.	Apgar Score	Frequency	Prosentase (%)
1.	Asphyxia	32	62,75
2.	Not	19	37,25

	Asphyxia		
Total	51	100	

Source: Secondary data registers medical record in 2008

Based on the table above asphyxia in newborns baby by Apgar Score as many as 32 (62.75%).

Table 3. Post Date Pregnancy gestation with asphyxia cases in newborn baby in Obstetrics Room of RSUD Jombang 2008

Dependen Independe	Asphyxia	Not asphyxia	Total
Aterm pregnancy	5 (41,67%)	7 (58,33%)	12 (100%)
Postdate pregnancy	29 (74,36%)	10 (25,64%)	39 (100%)
Total	34 (66,67%)	17 (33,33%)	51 (100%)

Source: Secondary data registers medical record in 2008

Based on the table above post date pregnancy total of 39, were asphyxiated 29 infants and are not asphyxiated as many as 10 babies

Table 4. Analysis of Post Date Pregnancy With asphyxia cases in newborn baby in Obstetrics Room of RSUD Jombang 2008.

Category	fo	fh	fo- fh	(fo- fh)²	$\frac{(fo - fh)^2}{fh}$
Aterm					
Asphyxia	5	8	-3	9	1,8
Not Asphyxia	7	4	3	9	1,28
Post date					
Asphyxia	29	26	3	9	0,31
Not Asphyxia	10	13	3	9	0,9

$$\begin{aligned}
 X^2 &= X_1 + X_2 + X_3 + X_4 \\
 &= 1,8 + 1,28 + 0,31 + 0,9 \\
 &= 4,29
 \end{aligned}$$

Comparing with X_2 X_2 count table.

$$X^2 \text{ count} = 4.29$$

$$X^2 \text{ table} = 3.84$$

$X^2 \text{ count} \geq X^2 \text{ table}$ atau $4.29 \geq 3.84$, H_0 rejected and H_1 accepted meaning there is a relationship between postdate pregnancy with asphyxia cases in newborn baby.

Discussion

Most postdate pregnancy as much as 39 pregnant

woman, can cause asphyxia as many as 29 and not asphyxia as many as 10, based on data on the incidence of post date pregnancy by asphyxia is still high so that health professionals tend to be active by performing resuscitation training that can help implemented to reduce maternal and infant mortality rate. Having determined using *Chi Square* test manually with significant level of 5% dk: 1 concluded $X^2 \text{count} \geq X^2 \text{table}$ ($4,29 \geq 3,84$)) then H_0 rejected H_1 accepted, which means that there is a relationship between postdate pregnancy with asphyxia in new born baby. According Prawirohardjo this is due to a decrease in placental function. As a result of the aging process of the placenta, the supply of food and oxygen will decrease in addition to the spiral arteries spasm. The fetus will experience stunted growth and weight loss baby. The amount of amniotic fluid is reduced resulting in a change of abnormal fetal heart (Prawirohardjo, 2005) in addition to a decrease in placental function asphyxia also be caused by amniotic fluid characterized by thick meconium, have a PH value that is significantly lower than the pH of amniotic fluid with mikonium dilute and this situation can be reduced but not eliminated altogether.

Based on the description of post date pregnancy tend occurrence of asphyxia in newborns this was due to reduced volume of amniotic fluid. The cause postdate pregnancy can harm the fetus because it is sensitive to stimulation contractions that cause asphyxia and fetus death. Through the time postdate pregnancy should receive more attention in the handling of the aid delivery, supervision conducted during childbirth as heart rate , decreased fetal movement or not and to assess the maturity of the cervix. Labor induction is very important to minimize the occurrence of fetal distress requiring urgent assistance by conducting resuscitation quickly to reduce mortality of the fetus from the description above duties of midwives face postdate pregnancy is to uphold the truth pregnant through time, consult and refer mothers to antenatal basis regular and diligent checkups to health care, and encourage mothers to check ultrasound. Where in this ultrasound examination can be known gestation, interpret fetal weight, check the degree of maturity of the placenta and amniotic fluid state as well as their votes intrauterine fetal growth restriction. The results of this study are supported by research conducted by Baskett TF et al states that a pregnant woman will give birth with gestational age more than expected labor or post-

date it is liable or potentially high risk for the occurrence of asphyxia in babies who will be born due to reduced function of the placenta as a O₂ exchange.

Conclusion

1. Most of postdate pregnancy total is 35 (68.63%) in Obstetrics Room of RSUD Jombang
2. Most of the babies born in Obstetrics Room of RSUD Jombang, asphyxiated by 32 (62.35%) and were not asphyxiated by 19 (37.25%).
3. Based on the statistical test *Chi Square* manually with significant level of 5% and obtained $X^2_{\text{count}} \geq X^2_{\text{table}}$ ($4,29 \geq 3,84$) then H_0 rejected H_1 accepted, which means that there is a relationship between postdate pregnancy with asphyxia in new born baby in Obstetrics Room of RSUD Jombang

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EFFECT OF STIMULATION METHOD TO PLAY ROLE (ROLE PLAY) POWER CAPABILITY TO REMEMBER (MEMORY) CHILDREN AGES 4-6 YEARS IN TK TUNAS HARAPAN I PAMEKASAN

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ABSTRACT

Introduction: Stimulation is the stimulation that comes from outside the individual child's environment. The purpose of this study was to determine the effect of the stimulation method of playing the role of the child's ability to remember. **Methods:** This research method is pre-experiment with approaches one group pretest posttest. Intervention variable stimulation methods play a role (Role Play) dependent variable retention ability I waste 4-6 years. Population is 21 respondents, a sample of his research is the 16 respondents. Sampling using probability sampling with proportionate stratified random sampling method, instruments used were observation and interview sheet. The statistical test used Wilcoxon test. Memory before the child is given stimulation using role play (Role Play) are largely lacking, and after the stimulation using methods play a role (Role Play) is mostly good. **Result:** The results of the data analysis by Wilcoxon test showed a P value Value (0.001) with a significance level α (0.05), mean value P Value $<\alpha$, it means There is the influence of stimulation methods play a role (Role Play) on the ability of memory children aged 4-6 years in kindergarten Tunas Harapan I Pamekasan. **Discussion:** Expected to be used as supplementary material new information and knowledge so that raises awareness of interest to use the method of Role Play in helping to improve the ability of memory (Memory) children, particularly by providing stimulation using role play (Role Play) in the current educational environment of the learning process.

Keywords: Stimulation, Role Playing, Memories.

POST DATE PREGNANCY IN COLERATION WITH ASPHYXIA CASE IN NEWBORN BABY

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ABSTRACT

Introduction: Post date Pregnancy is when the period of babies gestation more than 42 weeks or more without attention to their birth weight so that the placenta is not able to provide nutrients and CO₂ / O₂ transportation which can cause the fetus at risk of asphyxia and foetal death. The purpose of this study to determine the relation of post date pregnancy with asphyxia case in newborn baby in Obstetric room of RSUD Jombang 2008 and the study was conducted in June 2009. **Methods:** This study used a descriptive analytic cross sectional approach. The population is all labor mothers with post date pregnancy. Sampling was done by *Random Sampling technique*. The independent variable is post date pregnancy, and dependent variable is newborn baby with asphyxia. Data were analyzed using cross tabulation test using *Chi Square* with significance level of 5%. **Results:** There was a relation between post date pregnancy with asphyxia case in newborns in hospitals Jombang with $\geq X^2$ count value table ($4.29 \geq 3.84$). Thus as professional health workers tend to be active by encouraging at every pregnant woman checkups early and regularly so that the risk of pregnancy problems can be detected early.

Key Word : post date pregnancy, asphyxia, new born baby

INTRODUCTION

Post date pregnancy is pregnancy that beyond the age of 292 days (42 weeks) gestation with symptom many possibility of complications, another name for postdate pregnancy is serotinus prolonged pregnancy or post-term pregnancy (dr I A, Chandranita Manuaba SpOG, 2008).

Infant Mortality Rate (IMR) based on demographic and health survey Indonesia (IDHS) in 2002 was 59 per 1,000 live births decreased to 35 per 1,000 in 2005, while the targets based on indicators of Healthy Indonesia 2010 amounted to 33/1000 live births and the 2015 (Millennium Development Goal / MDG) of 23 per 1,000 live births. The cause of neonatal mortality highest age group of 0-7 days is premature and low birth weight (LBW) (35%) and birth asphyxia (33.6%) the cause of neonatal mortality highest age group of 8-20 days is an infection of 57.1% (including tetanus, sepsis, pneumonia, diarrhea) and then feeding problems (14.3%) (MOH, 2006).

In East Java, according to the Central Statistics Agency recorded the Maternal Mortality Rate (MMR) has declined from 334 per 100,000 live births in 1997 to 262 per

100,000 in 2005 while the infant mortality rate (IMR) has declined from 44.64 per 1,000 births life in 2002-2003 became 35.32 per 1,000 in 2005-2006.

Post date pregnancy is pregnancy that beyond the age of 292 days (42 weeks) gestation with symptom many possibility of complications, another name for postdate pregnancy is serotinus prolonged pregnancy or post-term pregnancy (dr I A, Chandranita Manuaba SpOG, 2008). The problem for this postdate pregnancy is when the placenta is not able to provide nutrients and CO₂ / O₂ transportation that make the fetus is at risk of asphyxia and foetal death. Possibility of mortality risk in postdate pregnancy can be three times as compared to term pregnancies, other complications that may occur is: the location of the deflection, the occiput posterior position, shoulder dystocia and postpartum hemorrhage. In postdate pregnancy should get special attention well so the end result of this pregnancy is well born baby and mother health can be achieved (Yulianti Devi, 2007).

The most important thing in dealing with postdate pregnancy to determine the state of the fetus because any delay would pose a risk. With conservative attitudes risk of

perinatal death ranges from 0.22%, while experiencing the risk of asphyxia 33% so it tends to be active after determining the state of the fetus and thus do not find on perinatal mortality (Prawirohardjo, 2005).

Research purposes

1. Identify the incidence of post date pregnancy.
2. Identify asphyxia case in newborns baby.
3. Analyze the relationship between gestational age post-date with asphyxia case in newborns baby.

METHODS

Research design

In this study, the study design used is descriptive method Analytical approach "Cross Sectional".

Population, Sample, Sampling

The population in this study were all women giving birth in Obstetrics Room of RSUD Jombang in 2008. The sample used most women giving birth in Obstetrics Room of RSUD Jombang samples that meet the criteria. Sampling design used in this study is the *Probability Sampling. Simple Random Sampling* technique.

Sample criteria

1. Mothers who gave birth with postdate pregnancy in Obstetrics Room of RSUD Jombang
2. Mothers who gave birth with aterm pregnancy in Obstetrics Room of RSUD Jombang

Variables identification

1. The independent variables in this study is postdate pregnancy. Mothers whose pregnancies over 42 weeks (post date), and mothers whose pregnancies 38-42 weeks (term), based on the first day of the last menstrual period recorded in the medical record. Tools: checklist. Criteria: Pregnancy at term (2) & Pregnancy post date (1). Nominal scale.
2. The dependent variable in this study were newborn baby with asphyxia case. Babies who are not able to breathe spontaneously and regularly after the cord is cut recorded in the

medical record. Tools: checklist. Criteria: Asphyxia (1) & Not asphyxia (2). Nominal scale.

Location and Time Research

The location of research conducted in Obstetrics Room of RSUD Jombang. When the study will be carried out between the months of February to June, 2009.

Data Collection and Data Analysis

Data collection in studies using secondary data is data that is retrieved from the data in the medical record in Obstetrics Room of RSUD Jombang. To determine the relationship between postdate pregnancy with asphyxia case in newborns, then the two variables tested using statistical test Chi Square. With the 5% significance and criteria, aterm pregnancies: 1, post date pregnancy: 2 then connect the dependent variable with asphyxia assessment criteria: 1, not asphyxia: 2. If $X^2_{\text{count}} \geq X^2_{\text{table}}$ then H_0 rejected and H_1 accepted meaning there is a relationship between age post pregnancy date with asphyxia in newborns. If $X^2_{\text{count}} < X^2_{\text{table}}$ then H_0 accepted and H_1 rejected meaning there is no relationship between postdate pregnancy-date with asphyxia.

RESULT RESEARCH AND DISCUSSION

Table 1. Distribution of Postdate Pregnancy based on it gestation period in Obstetrics Room of RSUD Jombang 2008.

No.	Gestation period	Frequency	Prosentase (%)
3.	Aterm pregnancy	16	31,37
4.	Post date pregnancy	35	68,63
Total		51	100

Source : secondary data based on egister medical record n 2008.

According to table above there are 35 (68,63%) postdate pregnancy.

Table 2. Distribution Asphyxia cases in newborn baby based on their APGAR Score in Obstetrics Room of RSUD Jombang 2008.

No.	Apgar Score	Frequency	Prosentase (%)
1.	Asphyxia	32	62,75
2.	Not Asphyxia	19	37,25
Total		51	100

Source: Secondary data registers medical record in 2008

Based on the table above asphyxia in newborns baby by Apgar Score as many as 32 (62.75%).

Table 3. Post Date Pregnancy gestation with asphyxia cases in newborn baby in Obstetrics Room of RSUD Jommbang 2008

Dependen Independe	Asphyxia	Not asphyxia	Total
Aterm pregnancy	5 (41,67%)	7 (58,33%)	12 (100%)
Postdate pregnancy	29 (74,36%)	10 (25,64%)	39 (100%)
Total	34 (66,67%)	17 (33,33%)	51 (100%)

Source: Secondary data registers medical record in 2008

Based on the table above post date pregnancy total of 39, were asphyxiated 29 infants and are not asphyxiated as many as 10 babies

Table 4. Analysis of Post Date Pregnancy With asphyxia cases in newborn baby in Obstetrics Room of RSUD Jommbang 2008.

Category	fo	fh	fo-fh	(fo-fh)²	$\frac{(fo - fh)^2}{fh}$
Aterm					
Asphyxia	5	8	-3	9	1,8
Not Asphyxia	7	4	3	9	1,28
Post date					
Asphyxia	29	26	3	9	0,31
Not Asphyxia	10	13	3	9	0,9

$$\begin{aligned}
 X^2 &= X_1 + X_2 + X_3 + X_4 \\
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Comparing with X_2 X_2 count table.

$$X^2 \text{ count} = 4.29$$

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DISCUSSION

Most postdate pregnancy as much as 39 pregnant woman, can cause asphyxia as many as 29 and not asphyxia as many as 10, based on data on the incidence of post date pregnancy by asphyxia is still high so that health professionals tend to be active by performing resuscitation training that can help implemented to reduce maternal and infant mortality rate. Having determined using *Chi Square* test manually with significant level of 5% dk: 1 concluded $X^2 \text{count} \geq X^2 \text{table}$ ($4,29 \geq 3,84$)) then H_0 rejected H_1 accepted, which means that there is a relationship between postdate pregnancy with asphyxia in new born baby. According Prawirohardjo this is due to a decrease in placental function. As a result of the aging process of the placenta, the supply of food and oxygen will decrease in addition to the spiral arteries spasm. The fetus will experience stunted growth and weight loss baby. The amount of amniotic fluid is reduced resulting in a change of abnormal fetal heart (Prawirohardjo, 2005) in addition to a decrease in placental function asphyxia also be caused by amniotic fluid characterized by thick meconium, have a PH value that is significantly lower than the pH of amniotic fluid with mikonium dilute and this situation can be reduced but not eliminated altogether.

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through time, consult and refer mothers to antenatal basis regular and diligent checkups to health care, and encourage mothers to check ultrasound. Where in this ultrasound examination can be known gestation, interpret fetal weight, check the degree of maturity of the placenta and amniotic fluid state as well as their votes intrauterine fetal growth restriction. The results of this study are supported by research conducted by Baskett TF et al states that a pregnant woman will give birth with gestational age more than expected labor or post-date it is liable or potentially high risk for the occurrence of asphyxia in babies who will be born due to reduced function of the placenta as a O₂ exchange.

CONCLUSSION

Most of postdate pergnancy total is 35 (68.63%) in Obstetrics Room of RSUD Jombang. Most of the babies born in Obstetrics Room of RSUD Jombang, asphyxiated by 32 (62.35%) and were not asphyxiated by 19 (37.25%). Based on the statistical test *Chi Square* manually with significant level of 5% and obtained $X^2_{\text{count}} \geq X^2_{\text{table}} (4,29 \geq 3,84)$ then H₀ rejected H₁ accepted, which means that there is a relationship between postdate pregnancy with asphyxia in new born baby in Obstetrics Room of RSUD Jombang

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