

## The 6<sup>th</sup> International Nursing Conference

# Emphasize the Art of Nursing on Research, Education into Clinical and Community Practice

Surabaya, November 16<sup>th</sup>–17<sup>th</sup> 2015



Faculty of Nursing  
Universitas Airlangga



Flinders University  
Australia

*avans*

Hogeschool  
The Netherland



Naresuan University  
Thailand



University of Rhode Island  
U S A



Hiroshima University  
Japan

The Proceeding of 6<sup>th</sup> International Nursing Conference:  
Emphasize the Art of Nursing on Research, Education into Clinical and Community Practice

Fakultas Keperawatan Universitas Airlangga



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Fakultas Keperawatan Universitas Airlangga

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## GREETING FROM STEERING COMMITTEE

*Assalamualaikum Warahmatullahi Wabarakatuh*

Honorable Rector of Airlangga University  
Honorable Dean of Nursing Faculty  
Honorable Chairman of Indonesian Nasional Nurse Association East Java  
Distinguished Speakers and all Participants

Praise the presence of God Almighty, for his mercy so that Faculty of Nursing Airlangga University can organized the International Conference on the theme "Emphasize The Art of Nursing on Research, Education into Clinical and Community Practice". Welcome in Surabaya, City of Heroes Indonesia.

This international conference in conducted in cooperation with several institutions, National Population and Family Panning Board Indonesia, Naresuan University, Hiroshima University, School of Nursing and Midwifery Flinders University Australia, Avans Hogeschool Netherlands, and University of Rhode Island USA.

Participants of this conference are lecturers, nurses, students both from clinical and educational setting, regional and overseas area.  
Finally, I would liketo thanks to all speakers, participants, and sponsors so that this conference ca be held succesfully.

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

*Wassalamualaikum Warahmatullahi Wabarakatuh*

### **Steering Committee**

# OPENING REMARK FROM THE DEAN OF FACULTY NURSING

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*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 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 6th International Nursing “**Emphasize The Art of Nursing on Research, Education into Clinical and Community Practice**”. I hope that this conference have good contribution in increasing the quality of nursing and nursing care.

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. The 6th International Nursing Conference, arranged in cooperation with several institutions such as Flinders University Australia, BKKBN-Indonesia, University of Rhode Island USA, Naresuan University Thailand, Avans University -Netherland, and Hiroshima University-Japan.

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Finally, I would like to thank to all speakers, participants, and sponsorship that helped the success of this event.

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**

# WELCOME MESSAGE FROM RECTOR OF UNIVERSITAS AIRLANGGA, INDONESIA

*Assalamualamualaikum Warohmatullahi Wabarokatuh*

Distinguished guests

Keynote speakers and participants of The 6<sup>th</sup> International Nursing Conference

Ladies and Gentlemen,

Praised be to Allah SWT for his love and compassion that we are given the opportunity to gather and meet in The 6<sup>th</sup> International Nursing Conference held by Faculty of nursing, Universitas Airlangga, Surabaya, East Java, Indonesia.

It is indeed my honor to have the opportunity to be with all keynote speakers and participants of this program.

As we all know that, despite the very rapid development of information and technology recently, the world where we are living now is still facing a very complicated health problem. A growing trend in the deterioration of human health still exist. Such phenomena even occurs in developed countries where modern healthcare facilities are available. Cause of health problems varies, and therefore it is our responsibility to find out the best solution to the problem as soon as possible.

Efforts have to be conducted more seriously to eradicate all kinds of diseases which cause the weakening of human quality of life. For this purpose, a professional healthcare system is one of many methods that have to be developed world wide. Such system should be managed by health professionals, including nurses, who are capable of working hand-in hand to improve and enhance the quality of human health, disease prevention, and rehabilitation.

As nursing care has been the main issue in our today's world, this conference provides a great opportunity for nurses to build better knowledge, skill and practice which could improve the quality of nursing care.

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More importantly, through a better preparatory course, an increasing awareness on the important role of nurses that provided patient care which optimizes medication therapy and promotes health, wellness and disease prevention will soon be achieved. Through such achievement, we have been started showing our contribution to the development of a healthy society, which later can bring us to reach our vision in building a healthy world in the coming years.

I would also like to express my sincere hope, that through this program, a better practice of nurses from many institutions must be created to open an opportunity for conducting the community healthy service and enhancing quality of life. This is a prerequisite towards harmonization of education and practice of nursing.

In this special event, I would like to thank all keynote speakers in this program for their remarkable contributions which will help all of us, including all participants, to understand better about the practice of Nursing.

Last but not least, I would also like to express my gratitude to the committee of this program, especially to the Faculty of Nursing Universitas Airlangga, Flinders University Australia, BKKBN Indonesia, University of Rhode Island USA, Naresuan University, Thailand, Avans University Netherland, Hiroshima University Japan and all participants, for their contribution in making this program success.

And, as a Rector of Universitas Airlangga, herewith I am declaring the official opening of **The 6<sup>th</sup> International Nursing Conference.**

Thank you for your kind attention.

*Wassalamualaikum Warrahmatullahi Wabarokatuh*  
With my best wishes,

Prof. Dr. Moh. Nasih, SE, MT, Ak, CMA  
**Rector**



## STEERING COMMITTEE

Counsellor	: Rector of UniversitasAirlangga
Advisor	: Dean of Faculty of Nursing, UniversitasAirlangga
Vice Advisor	: Vice Dean 1 of Faculty of Nursing, UniversitasAirlangga Vice Dean 2 of Faculty of Nursing, UniversitasAirlangga Vice Dean 3 of Faculty of Nursing, UniversitasAirlangga
Committee Chairman	: Ni Ketut Alit Armini, S.Kp.,M.Kes.
Vice Chairman	: RetnayuPradanie, S.Kep., Ns., M.Kep.
Secretary	: IqlimaDwiKurnia, S.Kep., Ns., M.Kep.
Finance	: PrabaDiyanaRachmawati, S.Kep., Ns., M.Kep. NinikSetyaningrum D., SH.
Scientific Reviewer and Ceremonial Committee	: Prof. Dr. Nursalam, M.Nurs (Hons) Dr. Kusnanto, S.Kp.,M.Kes. Dr. Ah. Yusuf, S.Kp.,M.Kes. Dr. Joni Haryanto, S.Kp.,M.Si. Dr. TintinSukartini, S.Kp.,M.Kes. EstiYunitasari, S.Kp.,M.Kes. LailyHidayati, S.Kep., Ns., M.Kep. EkaMishbahatulM.Has., S.Kep., Ns., M.Kep. TiyasKusumaningrum, S.Kep., Ns., M.Kep. IlyaKrisnana, S.Kep., Ns., M.Kep.
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Transportation and Equipment	: Drs. H. M. Syakur DeniYasmara, S.Kep., Ns., M.Kep., Sp.Kep.MB Suharto, SE Sodiqin

# CONFERENCE SCHEDULE

## DAY 1, 16<sup>th</sup> NOVEMBER 2015

07.30 am -08.30 am	Registration
08.30 am -09.00 am	Indonesia Raya Anthem Welcoming Show
09.00 am -09.30 am	<b>Opening Remarks</b> Speak from Steering Committee Chairman Speak from Dean Faculty of Nursing, Universitas Airlangga Speak from Rector Universitas Airlangga <b>Pray:</b> H. M. Syakur (in Bahasa)
09.30 am – 10.00 am	<b>Keynote Speaker</b> <b>Dr. Surya Chandra Surapaty, MPH, PhD</b> Family Planning Board, Indonesia <i>“Challenge and Opportunity Indonesia Demographic Bonus on Strengthening Health Services”</i>
10.00 am– 10.10 am	Certificate & Souvenir Given to Rector UNAIR and Keynote Speaker
10.10 am– 10.20 am	Opening Session of Poster Presentation
10.20 am – 10.45 am	Coffee Break
<b>Plenary Session 1</b>	
10.45 am-11.15 am	<b>Speaker 1</b> <b>Prof. Nursalam, M.Nurs (Hons)</b> Professor of Nursing, Faculty of Nursing, Universitas Airlangga, Indonesia <i>“The Power of Caring in Improving Nursing Quality of Care and Patient Safety”</i>
11.15 am-11.45 am	<b>Speaker 2</b> <b>Mary Sullivan, Ph.D., RN., FAAN</b> University of Rhode Island, USA <i>“Prematurity &amp; Intensive Neonatal Care in the US”</i>
11.45am- 12.15 pm	Plenary Discussion
	Giving Certificate & Souvenir to Speakers
12.15 pm – 13.00 pm	Pray and Lunch Poster Presentation 1

<b>Plenary Session 2</b>	
13.00 pm – 13.30 pm	<b>Speaker 3</b> <b>Motoyuki Sugai</b> Graduate School of Biomedical & Health Sciences, Hiroshima University, Japan “The Global Spread of Healthcare-Associated Antibiotic Resistant Bacteria”
13.30 pm – 14.00 pm	<b>Speaker 4</b> <b>Dr. Steve Parker</b> Associate Dean (Teaching and Learning), School of Nursing and Midwifery, Flinders University, Australia “Nurse Character Building Through Education”
14.00 pm – 14.30 pm	<b>Speaker 5</b> <b>Vivette van Cooten, MSc</b> School of Health, Avans University of Applied Science, Netherlands “GET Together, Technology in Health Education: Practice from Netherlands”
14.30 pm – 15.00 pm	Plenary Discussion Giving Certificate & Souvenir to Speakers
15.00 pm – 15.30 pm	Coffee Break and Pray
15.30 pm – 16.30 pm	Oral Presentation 1 (Room 1 and Room 2)

### **DAY 2, 17<sup>th</sup> NOVEMBER 2015**


07.30 am – 08.00 am	Registration
08.00 am – 08.15 am	Opening Show: Indonesian Traditional Songs
<b>Plenary Session 3</b>	
08.15 am – 08.45 am	<b>Speaker 6</b> <b>Dr. Joni Hariyanto, S.Kp., M.Si.</b> Faculty of Nursing, Universitas Airlangga, Indonesia “Prefrontal Comfort Theory of Nursing”

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08.45 am - 09.15 am	<b>Speaker 7</b> <b>Lesley Siegloff, RN, Dip T(Ned), Bed (NStud), MNA (UNSW) FCNA</b> Associate Dean (Practice Development), School of Nursing and Midwifery, Flinders University, Australia <i>"Interprofessional Clinical Management"</i>
09.15 am - 09.45 am	<b>Speaker 8</b> <b>Chuleekorn Danyuthasilpe, RN, Dr.P.H.</b> Assistant Professor, Faculty of Nursing, Naresuan University, Thailand <i>"Role of Community Nurses and Caring for Patients with Chronic Illness in the Community"</i>
09.45 am – 10.15 am	Plenary Discussion Giving Certificate & Souvenir to Speakers
10.15 am – 10.45 am	Coffee Break
<b>Plenary Session IV</b>	
10.45 am– 11.15 am	<b>Speaker 9</b> <b>Dr. Tintin Sukartini, S.Kp., M.Kes.</b> Faculty of Nursing, Universitas Airlangga, Indonesia <i>"Adherence Improvement Model based on King Interaction System"</i>
11.15 am – 11.45 am	<b>Speaker 10</b> <b>Dr. Diane Cocozza Martins, PhD, RN</b> Associate Professor, University of Rhode Island, USA <i>"Empowering Community for Health: USA Perspective"</i>
11.45 am – 12.15 pm	Plenary Discussion Giving Certificate & Souvenir to Speakers
12.15 pm – 13.00 pm	Prayer and Lunch Poster Presentation 2
13.00 pm- 15.00 pm	Oral Presentation 2 (Room 1 and Room 2)
15.00 pm – 15.30 pm	Coffee Break
15.30 pm – 16.00 pm	<b>Closing Remark</b> <b>Giving Certificate to Co. Host</b>

# CHALLENGE AND OPPORTUNITY INDONESIA DEMOGRAPHIC BONUS ON STRENGTHENING HEALTH SERVICES

**Dr. Surya Chandra Surapaty, MPH, PhD\***  
**\*FamilyPlanning Board, Indonesia**



**Challenges And Opportunities Of Demographic Dividend In Strengthening Health Services**

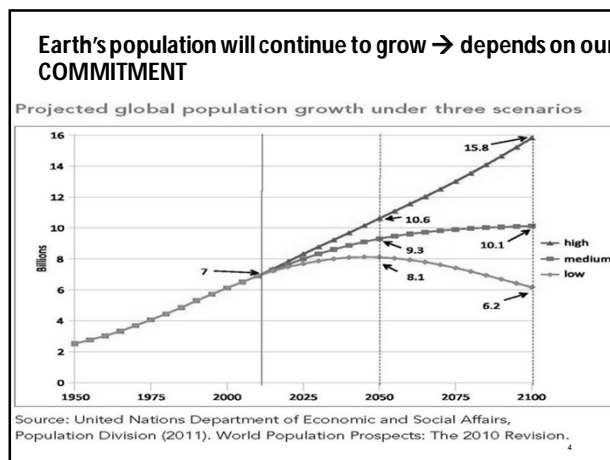
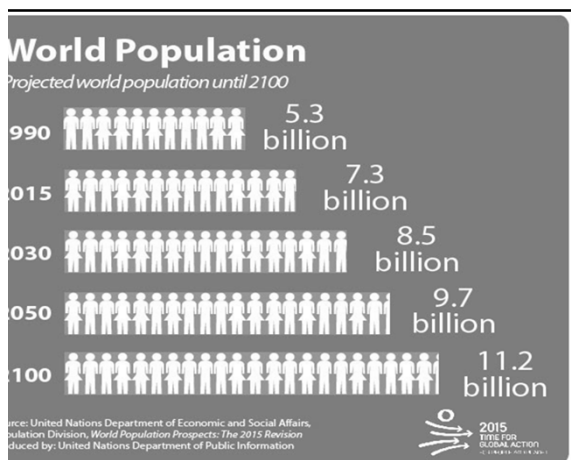


**Surya Chandra Surapaty**  
 (Chief of National Population and Family Planning Board)

*Delivered on The 6th International Nursing Conference 2015  
 Fakultas Keperawatan-Universitas Airlangga  
 Surabaya, November 16th 2015*

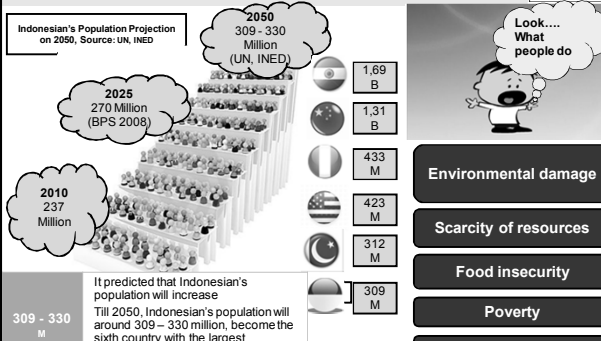


**I. World's Population Matter**




**II. How's Indonesia today?**

**Largest Population in 2050**



Indonesian's Population Projection on 2050, Source: UN, INED

- 2010: 237 Million
- 2025: 270 Million (BPS 2008)
- 2050: 309 - 330 Million (UN, INED)

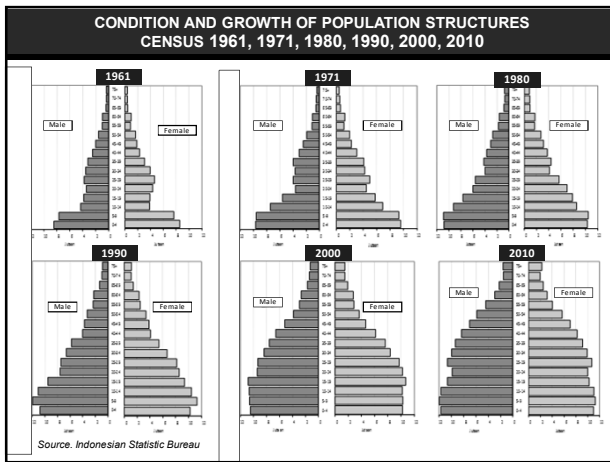
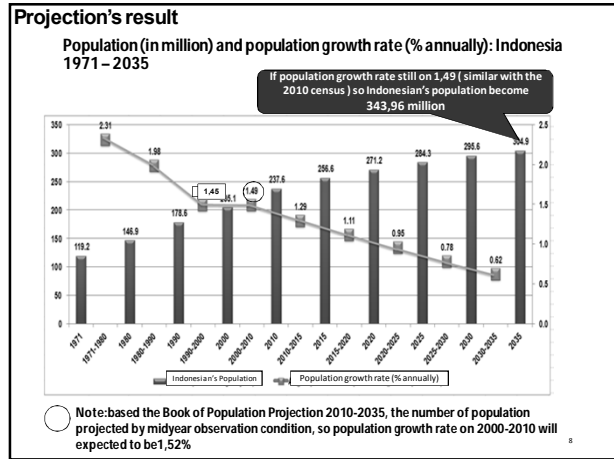
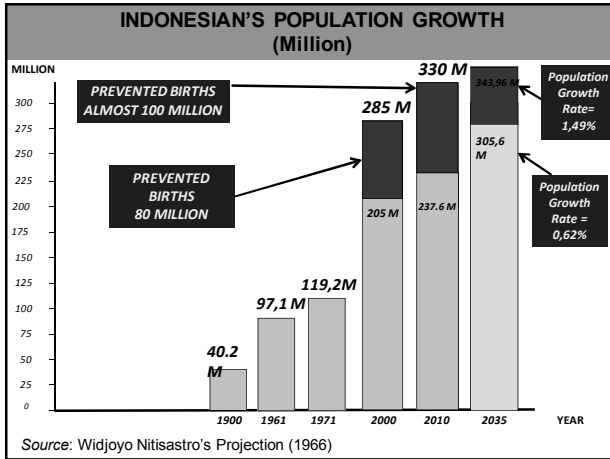
Other countries in 2050: USA (1.69 B), China (1.31 B), India (433 M), Brazil (423 M), Indonesia (312 M), Nigeria (309 M).

It predicted that Indonesian's population will increase. Till 2050, Indonesian's population will around 309 - 330 million, become the sixth country with the largest population.

Look.... What people do

- Environmental damage
- Scarcity of resources
- Food insecurity
- Poverty
- Social Conflict

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### Human Development Index in 2013 (in some countries)

Country	HDI Rank	Maternal Mortality Rate (deaths per 100,000 live birth)	Life expectancy at birth
Singapore	9	3	82,32
South Korea	15	16	81,54
Japan	17	5	83,58
Malaysia	62	29	75,02
Sri Langka	73	35	74,29
Thailand	89	48	74,4
Indonesia	108	220	70,83

## III. Demographic Dividend in Indonesia

- ### Definition of Demographic Dividend
- Demographic dividend defined as economic benefits that derive from dependency ratio declining as result of long term fertility depression (Wongboonsin, et al 2003).
  - Demographic dividend occurs when a falling birth rate changes the age distribution, so that fewer investments are needed to meet the needs of the youngest age groups and resources are released for investment in economic development and family welfare. (John Ross, 2004).

### DEMOGRAPHIC DIVIDEND

- Occurs once or twice in a country's lifetime
- Have positive impact to economic growth and nation's prosperity
- Globally, demographic dividend in developed country has been going in long time ago and some of them entered the final year
- USA entered demographic dividend on 1960-1965; Japan on 1990-1995; and South Korea, Taiwan and Hongkong will be ended on 2015.
- In ASEAN, demographic dividend in Singapore and Thailand will be ended on 2015, ongoing in Vietnam on 2015 – 2020, Malaysia on 2030 – 2040, Philipina on 2040 – 2050 and Indonesia is going to experience it on 2028 – 2031

**The Demographic Dividend**  
An Opportunity for the Next Generation

### UTILIZATION DEMOGRAPHIC DIVIDEND

*If utilize optimally, it will lead to windows of opportunity*

To trigger economic growth and increase food security in the context of national independence. At the same time, it will generate high quality population of productive age, so it becomes human capital of the nation's development

*If didn't utilize optimally, it will lead to windows of threats to welfare and security of the nation*

### Dependency Ratio dan Demographic Dividend

1971	2000	2010	2012-2035 Windows of Opportunity	>2045
86 child dan elderly per 100 productive age	54 child dan elderly per 100 productive age	51 child dan elderly per 100 productive age	49,6 – 47,8 child dan elderly per 100 productive age	>50 Continue increase because the rising proportion of elderly

Based on Indonesian census 2010 projection, Window of Opportunity narrowed dan dependency ratio no longer as low as expected

2028-2031	>2045
47 child dan elderly per 100 productive age	>50 Continue increase because the rising proportion of elderly

Source : Prof. Sri Moertiningsih Adioetomo SE MA PhD Head of Masters Program on Population and Labor University of Indonesia, 2011

### Explosion of the working age 1950-2050 and the Windows of Opportunity 2020-2030

- Rejuvenation of the working age (Widjojo, 1970)
- Bonus Demography and the Window of Opportunity, 2020-2030
- Leads to economic growth: employment opportunity, investment, labor participation of women and investment of children's education with quality, skill and competence

Sumber : Prof. Sri Moertiningsih Adioetomo SE MA PhD Head of Masters Program on Population and Labor University of Indonesia, 2011

### Demographic Dividend Challenge in Indonesia

- Based on 2010-2035 projection, demographic dividend began on 2012 and the lowest dependency ratio occurs on 2028-2031.
- Demographic dividend potency → increasement of working age and public savings as a economic growth resources
- Each province has different demographic dividend momentum because the differences of dependency ratio

Sumber: National Planning Board, et al, 2013, Population Projection 2010-2035.

### Demographic dividend offers 4 opportunities

- labor supply in large amount
- Women participation in labor market
- Public saving
- Human capital

# IV. Indonesia Still Facing Health-related Problems



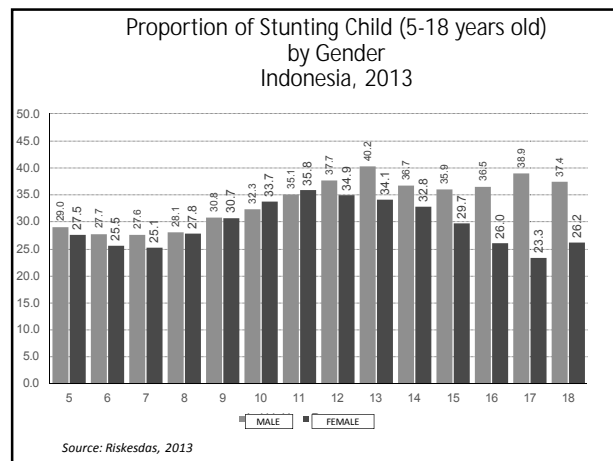
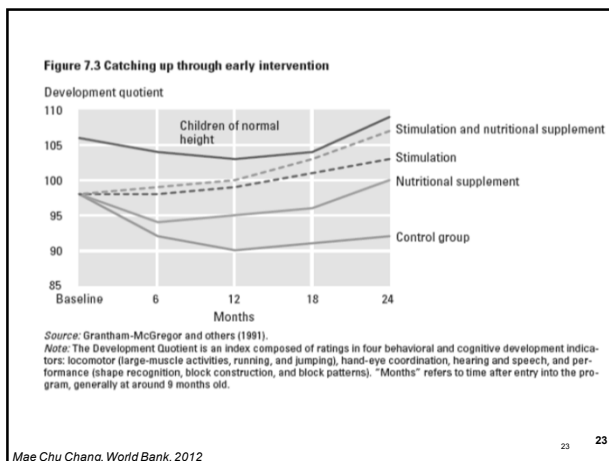
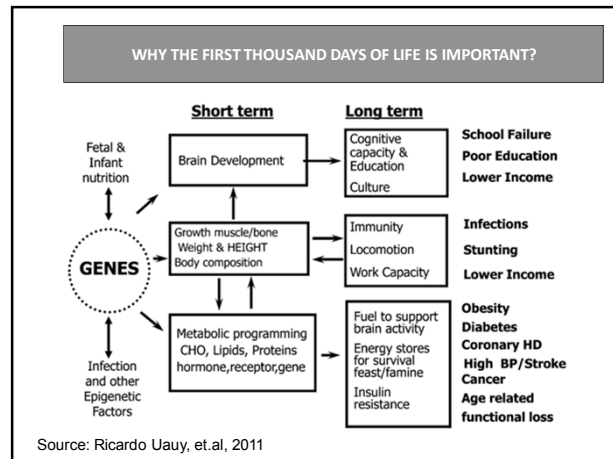
*In Indonesia, 8.4 million children are stunted (excessively small for their age) and suffer from chronic malnutrition.*

*Stunting can reduce an individual's productivity at a young age, and increases risks of developing non-communicable diseases when older – this is the double burden of malnutrition.*

Source: <http://www.worldbank.org/en/news/feature/2015/04/23/the-double-burden-of-malnutrition-in-indonesia>

**"Shortness is not the real problem. When it comes to stunting, other processes in the body are also stunted, such as brain development, which affects intelligence."**

**Prof. Dr. Endang Achadi**  
Nutrition expert from the University of Indonesia





### STUNTING IMPACT TO BRAIN DEVELOPMENT

**Normal**

Typical brain cell  
Extensive branching

**Stunting**

Impaired brain cell  
Limited branching  
Abnormal, shorter branches

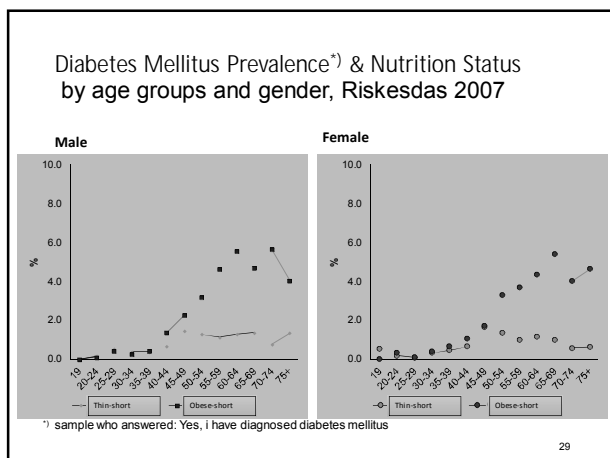
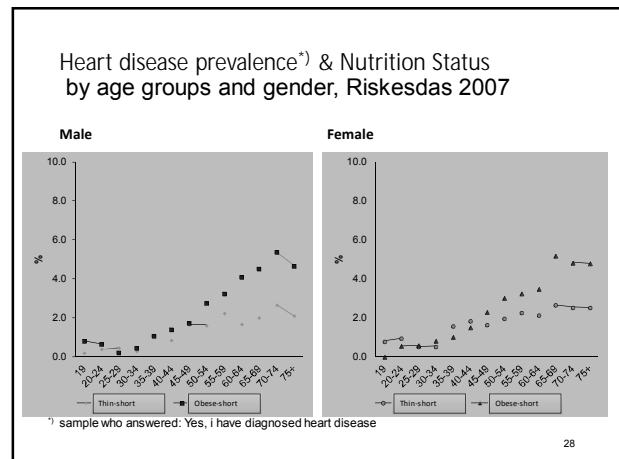
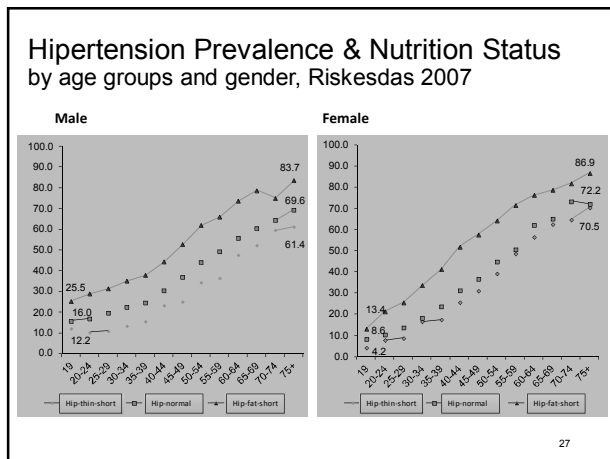
**3-Year-Old Children**

Normal      Extreme Neglect

<http://www.feralchildren.com/image.php?f=figures/perry20021>

Source: Cordero E et al., 1993

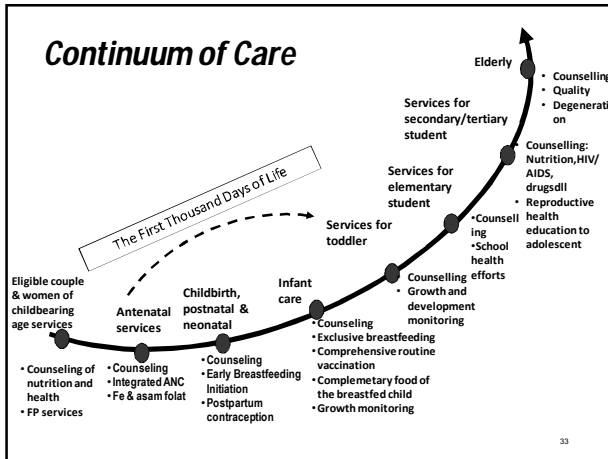
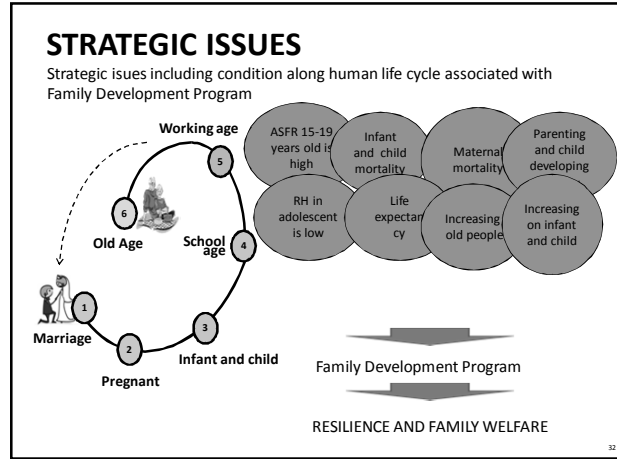
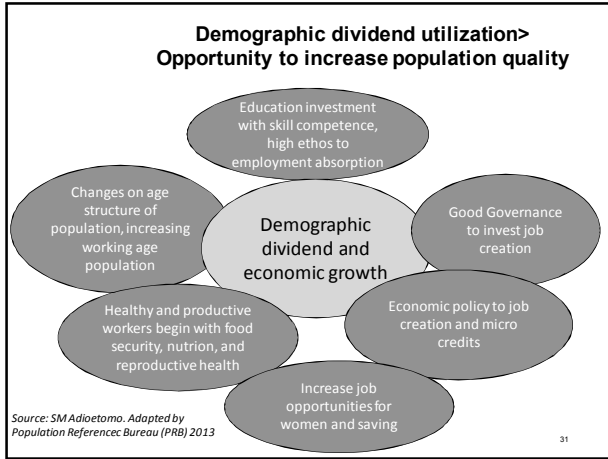
### NON COMMUNICABLE DISEASES IN YOUNG PEOPLE



## Strengthening Healthcare

Based on Life cycle approach

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**A nation's prosperity goes hand-in hand with improved population health. The health sector in Indonesia needs to adjust to the changing age structure of the population, with more services for the treatment and prevention of chronic life-style diseases. The large numbers of people smoking and the current shifts towards an unhealthy high-calorie diet are not consistent with taking maximum advantage of demographic dividends. New public health campaigns and services are needed. Family planning and reproductive health services need to be upgraded (Hull and Masley 2009). More attention also needs to be given to the social determinants of health inequality.**

Source: Hayes and Setyonaluri. 2015. Policy Memo. Taking Advantage of Demographic Dividend in Indonesia: A Brief Introduction to theory and Practice. UNFPA.

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Thank You

**2 Anak Cukup**

[www.bkkbn.go.id](http://www.bkkbn.go.id)

# THE POWER OF CARING IN IMPROVING NURSING QUALITY OF CARE AND PATIENT SAFETY

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

**\*Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia**

## INTRODUCTION

Caring as a central concept has led to the development of science and practice. Most individuals choose nursing as a profession because of their desire to care for other individuals. Two well known theories were developed in the 1970's, Leininger's Theory of cultural care and Jean Watson's Theory of human caring (McCance, McKenna, Boore 1999).

The main issue that was developed at this time for Indonesian nurses is the era of globalization and how to compete in it, especially the increased role of caring as a basis for improving the quality of nursing care and patient safety. As a profession that is still in the process towards "self-realization", the nursing profession is faced with various challenges. Challenges of internal improvements focused on four dimensions, namely the domain of nursing science, nursing services and nursing care, nursing practice, and nursing careers. External challenges such as demands for registration, licensing, certification such as nursing practice laws, competence demands and changing patterns of disease, increased public awareness of the rights and liabilities, changes in the national education system, and other changes in the supra-system and other related institutions.

Changes in various aspects of healthcare bring consequences for nursing, particularly community demands for a more professional role of nurses. Society is constantly evolving or changing, as well as the nursing profession. By the changes of the various factors that affect nursing, there will be a change in nursing, either changes in nursing care, or development of nursing science and technology, as well as changes in the nursing community, both as a society and as a professional community of scientists.

Nurses must act as a change agent with the principle that nurses must make a history, not just a story. The statement requires the courage to act and change the better. Nurses must have the courage to change. Do not be afraid to do the best, we often see that nurses hesitate with their comfortable zone currently. Andiwongso, the motivator, said "if we are being soft on ourselves, our life will be hard and if we are being harsh on ourselves, our lives will be soft. The road of life is not flat, we must flatten the way. Courage is not fearlessness of all things, but victory in dealing with fear on yourself. If there is a need, there is a way. People do not change when you tell them there is a better option, but they change when they conclude they have no other option.

Caring is offering of self. This means "offering the intellectual, psychological, spiritual, and physical aspects one possesses as a human being to attain a goal. In nursing, this goal

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8 is to facilitate and enhance patients' ability to do and decide for themselves (i.e., to promote their self-agency)" (Scotto, 2003). According to Scotto, "Nurses must prepare themselves in each of the four aspects to be competent to care" (2003). The following describes the four aspects identified by Scotto.

1. The intellectual aspect of nurses consists of an acquired, specialized body of knowledge, analytical thought, and clinical judgement, which are used to meet human health needs.
2. The psychological aspect of nurses includes the feelings, emotions, and memories that are part of the human experience.
3. The spiritual aspect of nurses, as for all human beings, seeks to answer the questions, "Why? What is the meaning of this?"
4. The physical aspect of nurses is the most obvious. Nurses go to the patients' homes, the bedside, and a variety of clinical settings where they offer strength, abilities, and skills to attain a goal. For this task, nurses first must care for themselves, and then they must be accomplished and skillful in nursing interventions.

For nurse to be able to care for others, they need to care for themselves. This is also important for practicing nurses. It takes energy to care for another person, and this is draining. Developing positive, healthy behaviors and attitudes can protect a nurse later when more energy is required in the practice of nursing.

## **WHAT IS THE ROLE OF NURSE IN CARING CAN IMPROVE A QUALITY OF CARE**

The core roles and competencies of nurse are:

- 1) Provide patient-centered care—Identify, respect, and care about patients' differences, values, preferences, and expressed needs; relieve pain and suffering; coordinate continuous care; listen to, clearly inform, communicate with, and educate patients; share decision making and management; and continuously advocate disease prevention, wellness, and promotion of healthy lifestyles, including a focus on population health. The description of this core competency relates to content found in definitions of nursing, nursing standards, nursing social policy statement, and nursing theories.
- 2) Work in interdisciplinary/interprofessional teams—Cooperate, collaborate, communicate, and integrate care in teams to ensure that care is continuous and reliable. There is much knowledge available about teams and how they impact care. Leadership is a critical component of working on teams—as team leader and as followers or members.
- 3) Employ evidence-based practice—Integrate best research with clinical expertise and patient values for optimum care, and participate in learning and research activities to the extent feasible.
- 4) Apply quality improvement—Identify errors and hazards in care; understand and implement basic safety design principles, such as standardization and simplification;

continually understand and measure quality of care in terms of structure, process, and outcomes in relation to patient and community needs; and design and test interventions to change processes and systems of care, with the objective of improving quality. Understanding how care is provided and problems in providing care often lead to the need for additional knowledge development through research.

- 5) Utilize informatics—Communicate, manage knowledge, mitigate error, and support decision making using information technology.

The role of nurses to provide caring must be developed along with the development of science, technology, and society demands. Nurses should be able to address and anticipate the impact of the changes. As a professional nurse, whose role is C-A-R-E (Nursalam, 2011).

### **C = Communication**

Characteristic of the professional nurse in providing nursing care is to communicate in full, adequate, and fast. It means, any communication (oral and written) with patients, colleagues and other health professionals must meet these three elements and supported by sufficient facts. The principle to establish communication is by applying excuse/always say hello, thanks, and sorry in every doing mistakes). Profile of nurses in the future is being able to speak and write a foreign language, for instance English. It is intended to anticipate the globalization in the 21st century.

### **A = Activity**

Activity/provision of nursing care is to carry out nursing care in a professional manner and to work with colleagues and other health professionals, especially medical team as a partner in providing care to patients. Such activity should be supported with adequate competence, demonstrate sincerity, empathy and responsible attitude towards every task performed.

### **R = Review & Responsive**

The main principle in carrying out the role of the nurse is moral and ethical nursing. When providing nursing care to clients, nurses should always be guided by the ethics of nursing and nursing standards and nursing science. It is important, in order to avoid mistakes that can be worst to the patient and the existence of the nursing profession who are seeking self-identity. In carrying out his professional role, nurses should apply ethical principles (JABVCF) which includes: justice, autonomy, beneficence and non-maleficence, veracity, confidentiality and fidelity. Efforts to avoid mistakes in providing nursing care to patients is necessary to apply the principles of nursing actions CWIPAT—Check the order, Wash your hands, Identify the clients, Provide safety and privacy, Assess the problem; and Teach or Tell the clients (Nursalam, 2008).

**E = Education/Enhancement**

The effort to improve the quality of nursing services in the future is that nurses must have a strong commitment to the profession to increase knowledge continuously through formal and informal, until at a certain expertise. Nurses are required to demonstrate autonomy in providing foster care and high confidence. It can be reached by preparing and equipping themselves well from now through increased education to a higher level. Nurses must demonstrate API (Actualization, Productive—avoid NATO “no action talk only”, and Innovative).

**CARING BEHAVIOR**

Some of nurses already do caring behaviors. Nurses may have learned as a part of nurse's values and experiences. Nursing students may learn new and different ways to care for others. Nurses will improve those behaviors toward being an expert nurse.

Jean Watson defines caring as a science. She states; Caring is a science that encompasses a humanitarian, human science orientation, human caring processes, phenomena, and experiences. Caring science includes arts and humanities as well as science. Caring makes a difference to the patient's sense of well being. Caring may occur without curing but curing cannot occur without caring (Watson, 2003).

**Watson's 10 Carative Factors** (McCance, McKenna, and Boore 1999):

1) Humanistic-altruistic system of values; 2) Faith-hope; 3) Sensitivity to self and others; 4) Helping-trusting, human care relationship; 5) Expressing positive and negative feelings; 6) Creative problem-solving caring process; 7) Transpersonal teaching-learning; 8) Supportive, protective, and/or corrective mental, physical, societal, and spiritual environment; 9) Human needs assistance; and 10) Existential-phenomenological-spiritual forces.

**CARING AS THE KEY TO IMPROVING QUALITY & PATIENT SAFETY**

Nursing has clearly been concerned with defining and measuring quality long before the current national and State-level emphasis on quality improvement. In the past, we have often viewed nursing's responsibility in patient safety in narrow aspects of patient care, for example, avoiding medication errors and preventing patient falls. While these dimensions of safety remain important within the nursing purview, the breadth and depth of patient safety and quality improvement are far greater. The most critical contribution of nursing to patient safety, in any setting, is the ability to coordinate and integrate the multiple aspects of quality within the care directly provided by nursing, and across the care delivered by others in the setting. This integrative function is probably a component of the oft-repeated finding that richer staffing (greater percentage of registered nurses to other nursing staff) is associated with fewer complications and lower mortality (Tourangeau, Cranley, & Jeffs, 2006).

Further, when we consider the key role of communication or communication lapses in the commission of error, the role of nursing as a prime communication link in all healthcare settings becomes evident. The definition of “error chain” clearly indicates the role of leadership and communication in the series of events that leads to patient harm. Root-cause analyses of errors provide categories of linked causes, including (1) failure to follow standard operating procedures, (2) poor leadership, (3) breakdowns in communication or teamwork, (4) overlooking or ignoring individual fallibility, and (5) losing track of objectives.

The following is a list of all goals. They are presented here for your convenience without their requirements, intent statements, or measurable elements. For more information about these goals, please see the next section in this chapter, Goals, Requirements, Intents, and Measurable Elements (JCI, 2011).

### **IPSG.1 Identify Patients Correctly**

Measurement:

1. Patients are identified using two patient identifiers, not including the use of the patient’s room number or location.
2. Patients are identified before administering medications, blood, or blood products.
3. Patients are identified before taking blood and other specimens for clinical testing.
4. Patients are identified before providing treatments and procedures.
5. Policies and procedures support consistent practice in all situations and locations.

### **IPSG.2 Improve Effective Communication—SBAR**

1. The complete verbal and telephone order or test result is written down by the receiver of the order or test result.
2. The complete verbal and telephone order or test result is read back by the receiver of the order or test result.
3. The order or test result is confirmed by the individual who gave the order or test result.
4. Policies and procedures support consistent practice in verifying the accuracy of verbal and telephone communications.

### **IPSG.3 Improve the Safety of High-Alert Medications (LASA: look a like, Sound a like)**

1. Policies and/or procedures are developed to address the identification, location, labeling, and storage of high-alert medications.
2. The policies and/or procedures are implemented.
3. Concentrated electrolytes are not present in patient care units unless clinically necessary, and actions are taken to prevent inadvertent administration in those areas where permitted by policy.
4. Concentrated electrolytes that are stored in patient care units are clearly labeled and stored in a manner that restricts access.

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**IPSG.4 Ensure Correct-Site, Correct-Procedure, Correct-Patient Surgery (Marker, Signs in, Time out, Sign out)**

1. The organization uses an instantly recognizable mark for surgical-site identification and involves the patient in the marking process.
2. The organization uses a checklist or other process to verify preoperatively the correct site, correct procedure, and correct patient and that all documents and equipment needed are on hand, correct, and functional.
3. The full surgical team conducts and documents a time-out procedure just before starting a surgical procedure.
4. Policies and procedures are developed that will support uniform processes to ensure the correct site, correct procedure, and correct patient, including medical and dental procedures done in settings other than the operating theatre.

**IPSG.5 Reduce the Risk of Healthcare–Associated Infections (VAP/HAP; CAUTI; phlebitis etc)**

1. The organization has adopted or adapted currently published and generally accepted hand-hygiene guidelines.
2. The organization implements an effective hand-hygiene program.
3. Policies and/or procedures are developed that support continued reduction of healthcare–associated infections.

**IPSG.6 Reduce the Risk of Patient Harm Resulting from Falls (by using Morse Force scale (adult); children (Humpty Dumpty); and Geriatric Scale)**

1. The organization implements a process for the initial assessment of patients for fall risk and reassessment of patients when indicated by a change in condition or medications, among others.
2. Measures are implemented to reduce fall risk for those assessed to be at risk.
3. Measures are monitored for results, both successful fall injury reduction and any unintended related consequences.
4. Policies and/or procedures support continued reduction of risk of patient harm resulting from falls in the organization.

Quality indicators measurement in nursing care are (1) patient safety: no adverse event/ medication error (Sentinel, KTD & KNC); and (2) patient satisfaction; (3) comfort; (4) anxiety; (5) Personal hygiene; (6) knowledge.



## CHALLENGING OF CARING

1. You may have decided to go into nursing because you care.
2. You will have the responsibility to maintain the caring nature of nursing focused on everyone responsibility, for every patient, and every day.
3. Begin here by developing that relationship with others and the carry that over into your career.

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# PREMATURITY AND INTENSIVE NEONATAL CARE IN THE US

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Each year, 15 million infants worldwide (World Health Organization, 2013) and more than 450,000 infants (11.5%) born in the United States are delivered prematurely. Advances in medicine have improved survival rates, but epidemiologic studies consistently show that the complications associated with prematurity affect health disparity later in life. Recognition of an increase in the risk of adverse health outcomes and multiple disabilities has led to efforts to improve infant outcome by changing the environment of care. These include environmental stimulation (e.g., sound and light), psychosocial factors, developmental care, family centered care, and staff behavior and attitudes.

The Neonatal Intensive Care Unit (NICU) is the first extrauterine environment for preterm infants. Critically ill infants require prolonged NICU stays; sometimes as long as five months, yet the typical NICU environment could be stressful for infants and their families. The majority of NICU infants continue to be cared for in an open bay environment where the sensory impact of the NICU may adversely affect infant outcome. The "single family room" model of care is one of the environments thought to enhance medical and developmental outcomes. The single room concept is attractive because factors that adversely affect the infant can be better controlled, patient care can be individualized and parent satisfaction can be improved. However, there is limited evidence to support this belief. A 4-year research study comparing infant outcome in a 'bay style' NICU with a new NICU of 70 individual single rooms has been completed to answer these questions.

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# THE GLOBAL SPREAD OF HEALTHCARE-ASSOCIATED ANTIBIOTIC RESISTANT BACTERIA

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In 2013, two top officials involved in public health administration in USA, CDC director Tom Frieden and in UK, Chief Medical Officer Prof. Dame Sally Davies simultaneously issued warning of global spread of resistance to antibiotics. They claimed immediate global action to stop the spread. In 2014, Keiji Fukuda, WHO's assistant director general for health security reported the emergence of antibiotic-resistant bacteria in every part of the world threatens to roll back a century of medical advances and even common infections and minor injuries can kill the patients, which is a real possibility for 21<sup>st</sup> century. Twenty first century will be a post antibiotic-era unless we take appropriate action. The crisis is due to several decades of overreliance on the antibiotics, careless prescription practices and routine use of the medicines in the rearing of livestock.

In this talk, I would like to introduce some globally spreading antibiotic resistant bacteria including methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant Enterococci, and Enterobacteriaceae producing extended-spectrum  $\beta$ -lactamase and carbapenemase and briefly explain their resistant mechanisms. I am also happy to discuss how to control the antibiotic resistant bacterial infection.

## DEVELOPING CHARACTER IN NURSES THROUGH EDUCATION

**Dr. Steve Parker, RN, RPN, DipT (Nurse Ed), BEd, PhD\***

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**School of Nursing & Midwifery, Flinders University, South Australia**

This presentation will explore how certain character traits can be developed in nurses during their education. In particular, it will discuss the way in which the careful development of good thinking skills can contribute to the development of these character traits. The presentation will include a discussion of why the development of character is important in nursing and offer a number of suggestions to incorporate strategies to achieve this in nursing education. The presentation will draw on a thinking model developed by Richard Paul and Linda Elder and show how it can be used to help design educational experiences that develop character in nursing students.

## "GET" TOGETHER, TECHNOLOGY IN HEALTH EDUCATION: PRACTICE FROM THE NETHERLANDS

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More and more technologies and innovative products are available to us in daily life. Increasingly these technologies are used in home-healthcare settings as well, as these products might contribute to better and more efficient care. This means that we have to educate our future healthcare professionals on these subjects.

The School of Health has developed a 'Health and Technology Laboratory (abbreviation in Dutch: GET-LAB), a restyled classroom with many different technologies, including a robotic seal, wearables and virtual bike tour. Students have the possibility to experience these technologies and experiment with them in different settings.

We believe that this way of learning will contribute to an open and critical mind on using technology in healthcare. We would like to share our story and practices with you.

# THE PREFRONTAL CORTEX OF COMFORT: TOWARD A MIDDLE RANGE THEORY

(Advances in nursing science, the theory can also be categories as humanistic theories)

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## **ABSTRACT**

**Introduction:** The development of nursing theory in the category of humanistic theory at the level of middle range theory is the result of a research dissertation with the title "effectiveness of nursing model about suggestion of healthy sleep patterns on sleep quality and quantity among elderly who experience insomnia and hypertension in Surabaya. This is important because the structure of the Indonesian's population has undergone a transition from toddlers to the elderly. Elderly are people who have over 60 years old and generally have decreased body function due to aging process and life mistakes factors. It is necessary to develop a theory about the prefrontal cortex comfort since it can lead physical, mental, social, spiritual, and economic equilibrium. **Method:** The research used 3 stages to develop a theory. First stage was criticized the existing research results, then conducted discussion forum, and the last stage was designing the theory. **Result:** There were significant effects of nursing model about suggestion of healthy sleep patterns on sleep quality and quantity among elderly who experience insomnia and hypertension in Surabaya. **Discussion:** After criticize the results and doing discussions, a new nursing theory was developed which consists a set of concepts, basic assumptions and proposition. The theory was named "the prefrontal cortex of comfort nursing theory".

## **INTRODUCTION**

The development of nursing theory, is based on the phenomenological study of sleep among elderly. Elderly experience sleep disturbances caused by various factors, such as the loss of sleepiness, body aches, tired, upset, palpitations, fear, feeling depressed (Haryanto, 2012). According to Miller (2009), the sleep disturbance among elderly caused by two factors, age changes and derived factors. Generally, with increasing age there is an increase awake in bed at night, up to 15 times awakened. Most elderly get up early and couldn't sleep again (Haryanto, 2010). More elderly sleep disorders caused by cardiovascular and neurological problems, which interfere with the regulation of ventilation. Immunological factors, such as hypersensitivity to pollen of a cushion material can causes obstruction of the airways. The



brain is an organ that is sensitive to lack of oxygen, making it easy awakened by apnea or hypopnea (Miller, 1999; O'Neill, 2002; Cole, 2006; Marie, 2007). The phenomenon is caused by the convenience factor that is not optimally obtained. Nursing effort is necessary to increase the comfort so that the elderly can enjoy sleeping optimally. The more severe sleep disorders experienced by elderly, related with the worse their health condition.

According to WHO (2010) the percentage estimation of elderly reached 9.11% of the total population in the world. The elderly aged  $\geq 65$  years In Japan are 22.6%, in Germany 20.5%, in America 20.1% and China 13%. In 2015 the population of elderly aged  $\geq 65$  in Indonesia are 13,729,992 of the 255 461 686 Indonesian's citizens. (Bureau, 2010; Judith, 2010; Diniwati 2011; BPS, 2015). The elderly in Indonesia on 2012 has reached 9.89%. East Java was the second rank with 10.4% of elderly, after Yogyakarta 13.04%. On 2013 the top ten most prevalent diseases among elderly (65–74 years) were hypertension 57.6%, 51.9% arthritis, stroke 46.1%, COPD 8.6%, 4.8% DM, 3.9% of cancer, coronary heart disease 3.6%, 1.2% of kidney stones , heart failure, renal failure 0.9% and 0.5%. Generally elderly have a prevalence of sleep disorders is less than 5 hours per day, approximately 30-40% (Gangwisch, 2009; Zulkarnain, 2010; Babatsikou, 2010; CBS. 2012; Jalal, 2014; Kepmenkes RI, 2014). The number of elderly in urban area are 12,380,321 (9.58%) and in rural are 15,612,232 (9.97%). The cause of mortality rate among elderly in urban are because of degenerative diseases, whereas in rural areas due to infectious diseases (Wirawan 2009; BPS 2010; Menkokesra RI, 2010).

On 2010 the population of Surabaya reached 2,968,946 people, and 296 312 of them were elderly people (11.04%). In East Java, Surabaya has a higher elderly population compared to Mojokerto 10.02%, Kediri 9.96%, Blitar 9.74%, Sidoarjo 10.7%, Pasuruan 10.21% and Jombang 9.79%. In Surabaya, insomnia reaches 26% elderly (Amir, 2007; Adib, 2008; Health Office, 2009). Based on preliminary survey at 12 RW in Mojo, Gubengvillage in Surabaya on July 29 to August 7, 2010, has elderly population of 6352, they experienced sleep disorder insomnia 23.3% (681 people), hypersomnia 12.9% (377 people), parasomnia 9.7% (283 people), narcolepsy 9.8% (286 people), and obstructive sleep apnea and snoring 44.3% (1,295 inhabitants) (Haryanto, 2010).

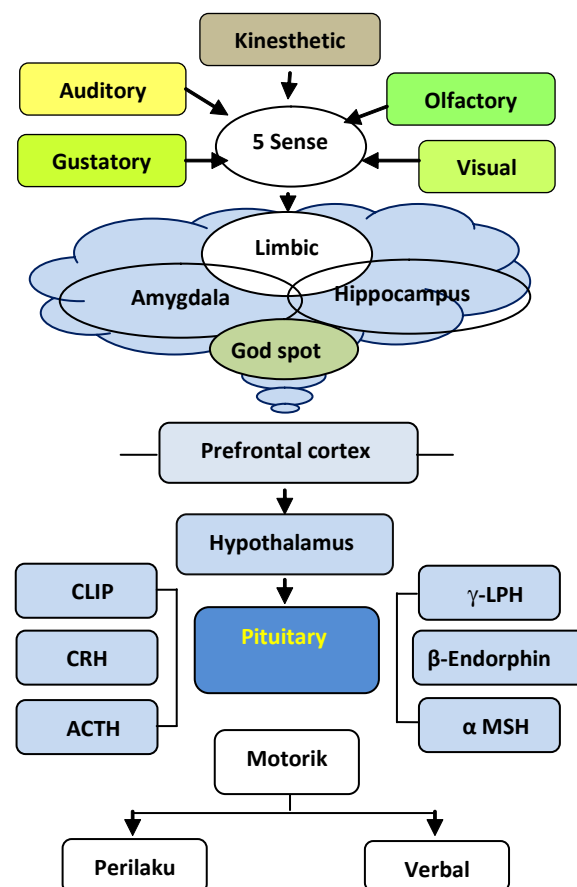
The incidence of multiple diseases among elderly was in line with disruption of sleep patterns among them. The unhealthy sleep patterns among elderly resulting in the pineal gland produces less melatonin and active adrenal glands produce cortisol and adrenaline. The hormone melatonin as a free radical scavenger, whereas cortisol is able to suppress the immune system and adrenaline stimulate the heart and blood vessels constriction. This condition can interfere the quality and quantity of elderly (Albright, 2003; Lai, 2005; Motivala, et al, 2006). But, the concrete solution to control elderly sleep still unknown. So, an explanation about the nursing theory about prefrontal cortex of comfort to improve the sleep quality and quantity among elderly with insomnia was really needed.

Elderly insomnia is a problem of biological, social, economic, spiritual, lifestyle and life. Insomnia sleep disorder can worsen the health of elderly who need to know the elderly sleep quality improvement efforts. Chronic insomnia sleep disorder that can make the gene mutation and disease acceleration degenerative (Stanhope & Lancaster, 2004; Shneerson, 2005; Martin, 2007). According to Henderson (1988) in a research about meeting the needs of everyday life, the 90.1% of elderly experienced sleep disturbances. The results of survey that conducted by Duke University Center for Demographic Studies (1988), showed that the number of sleeping disrupted among elderly aged over 65 years about 90.4%. According to Philip et al (1999) in his research, 85% of elderly aged 52–63 years experienced the failure of nighttime sleep. The need of sleep on elderly often disturbed with insomnia, impaired sleep rhythms, shortening the phase of rapid eyes movement (REM), also accompanied by elongation phase of non-rapid eyes movement (NREM) in one cycle of sleep a night (Wiener & Hanley, 1990; Ebersole, 2001; Philip, 2004; Miller, 2006; Marie, 2007; Marieza, 2010).

## CONCEPT

The concepts of the prefrontal cortex of comfort nursing theory are:

- 1) The convenience, which is defined as a sense of physical, mental, social, economic, and spiritual freed from the burden of tapping and self-harm.
- 2) Prefrontal defined as an organ of the front part of the brain, which serves as the perception and decision-making in determining attitudes and behavior.



**Deduction**

The major premise in this theory, is that all the five senses can stimulate comfort systems in the brain that can cause human sleep.

Minor premise, is the elderly people, it has a brain, and can be conditioned to create comfort at prefrontal cortex, the front upper part of the human brain.

In conclusion, then every elderly, who have the prefrontal cortex can be conditioned for comfort, certainly the elderly can sleep.

**Discipline**

A field of a branch of knowledge that involve research on gerontological nursing.

**Domain**

Related components or items that reflect the unified subject matter of a discipline on human of older people with insomnia.

**Empiricism**

Many elderly people could not meet sleep due to stress and depression. It is caused by aging and a factor derived from the habit of life (Miller, 2009). Empirically, there is a significant effect of nursing model about healthy sleep patterns suggestions that oriented on the comfort of prefrontal cortex on the quality of sleep among elderly in Surabaya, if there isn't one confounding variable which has an effects (Haryanto, 2014). The model also has significant effect on the quantity of sleep among elderly who experience insomnia and hypertension in Surabaya. But, the result showed that there was no difference between intervention and control group (Haryanto, 2014).

**Ethics**

A branch of philosophy concerned with moral principle that is respect for autonomy, non-maleficence, beneficence, and justice.

**Epistemology**

A branch of philosophy concerned with nature and scope of knowledge and the method used to acquire it. The body of knowledge from gerontology of nursing is building the knowledge of a mother's instinct to care that is both humanistic.

The method used to building theory is operational research with tree phase that is qualitative research (phenomenology comfort to sleep), design of theories and quantitative research with true experiment type pretest posttest only control group design.

## Induction

Reasoning from individual or particular to the general or universal. Nursing interventions in the form of sensory stimulation that occurs comfort prefrontal cortex, the elderly will fall asleep.

## Logic and Logical Positivism

A branch of philosophy concerned with sound reasoning and validity of thought. The prefrontal cortex of comfort can caused quality of sleep on elderly.

Philosophical perspective that espouses logic, objective, falseness, observable, and operationally defined concept and prediction. The use of words, facial expressions, performing and touch, persuasive, progressive, repetitive, simple, detail, and has significance for the health of themselves, then the prefrontal cortex become comfortable.

## Metaparadigm and Paradigm

Human, the elderly who experience sleep disturbances.

Environments, is a bedroom in the family.

Health, efforts towards the healthy condition of the elderly.

Nursing, is an effective form of intervention with verbal and nonverbal communication to occur a direct connection to the prefrontal cortex to happen comfort.

## Metatheory

A philosophical theory about theories, concerned with logical and methodological foundation of a discipline.

The various of nursing theory and supported theories that are practical, such as need self care, need comfort, functional consequences, aroma therapy, hypnosis, transcendent meditation and nursing system, thus forming the theory prefrontal comfort.

## Ontology

Literally that theory prefrontal cortex comfort is a result of the thought process that is controlled by the brain elderly front top edge decide free from physical, mental, social, spiritual and economic, so that the biological experience of self equilibrium.

Forma object in this theory is a form of nursing intervention in the form of effective communication are verbal and non-verbal, either directly or indirectly creates a feeling free from physical, mental, social, spiritual and economic.

Object material in this theory is the elderly who have a sleep disorder insomnia.

Functionally, that this theory can be used and serves to form the basis of nursing practice that meet the needs of the elderly sleep.

**Phenomenon**

Aspects of reality that has occurred, such as clients who have a sleep disorder insomnia given rhythm with the music can reduce sleep latency and increases sleep duration (Adesla, 2009).

Fina (2012) stated that administration keroncong music rhythm within 30 minutes can reduce the level of insomnia in the elderly. The provision of instrumental and verbal suggestions may improve the quality of sleep of elderly (Cicilia, 2014).

Benson (1996) stated Benson relaxation techniques, namely the concentration is terminated greeting one, two and so on. Benson granting practice relaxation techniques are helpful in meeting the needs of elderly who have trouble sleeping in initiating sleep.

Someone who perform transcendental meditation will focus on self-centered and God, until they able to feel the air in and out of airway, and so fell asleep (Toane, 1976).

Progressive relaxation is an effective way to rest the muscles through the proper way, followed by mental relaxation and mind. Used to reduce a variety of complaints associated with stress, such as anxiety, asthma, stomach pain, hypertension, and insomnia (Fernandez, 2004).

**Philosophy**

A set of believe or values and science concerned with the study of reality and the nature of being. An art in verbal and nonverbal communication can effectively provide comfort in prefrontal cortex, so that it can result a body balance and sleep in best quality.

**Science**

A systematized body of knowledge that has as it main purpose the discovery of term is nursing theories of toward a middle range theory of the prefrontal cortex of comfort.

**Theory**

Set interrelated concepts, based on assumptions, woven together through a set promotional statement, used to provide a perspective on reality. It is prefrontal cortex of comfort nursing theory. Advances in nursing science, the theory can also be categories as humanistic theories.

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## INTERPROFESSIONAL CLINICAL MANAGEMENT

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There are many health professionals involved in healthcare delivery today and as the numbers escalate the relationship between each of the professionals and teams can either fracture or strengthen. Interprofessional team work is important to ensuring quality outcomes for our patient population in the clinical context. The manager has a critical role to play in ensuring that interprofessional collaboration is achieved in the very complex healthcare system of today.

This paper will discuss interprofessional clinical management and the potential gains that can be achieved through excellence in interprofessional clinical management.



## ROLE OF COMMUNITY NURSES AND CARING FOR PATIENTS WITH CHRONIC ILLNESS IN THE COMMUNITY

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Chronic illness is an important public health challenge in Thailand. The health service system has been reoriented and several programs have been initiated to serve patients with chronic health problems. However, the problems of chronic illness have not decreased. The concept of health has changed from being health as illness and disease to be the concept of a way of life and lifestyle which affects the health and well-being of the population. Healthcare services to deal with the concerns of individuals with chronic illness need to be redesigned. Thus, caring for those living in the community needs a healthcare system which serves patients' need, all sectors of and service providers in the community, and local organizations should participate to enhance patients' health and quality of life.

The three main factors to be considered in caring for chronically ill patients in the community include the patients and their families, the overall community, and the health service system in general. The goals of nursing care are to maintain patients' functioning and to improve the patient's quality of life. To meet these goals, the role of community nurses needs to be expanded to be a proactive one to provide comprehensive healthcare and must actively work with all stakeholders, including patients, family caregivers and community groups. Community nurses have a responsibility to prepare and support patients to be able to self-manage their health needs. Family caregivers and other community members are encouraged to provide a network of support for the community nurses who provide community-based care. Community participation is enhanced to promote the well-being of patients with chronic illness.

## ADHERENCE IMPROVEMENT MODEL BASED ON KING INTERACTION SYSTEM

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### **BACKGROUND**

Indonesia is the fourth largest contributor to tuberculosis (TB) in the world in 2012, the number of new cases of approximately 400,000–500,000 cases, after India (2.0 million–2.5 million), China (900,000–1,100,000) and South Africa (400,000–600,000) cases (WHO, 2012). According to Riset kesehatan nasional or National Health Study in 2001, the pulmonary TB is the number one disease and as the third cause of death in Indonesia (Depkes, 2001).

Based on data from TB Sub Directorate of the Ministry of Health Republic of Indonesia and WHO (2008) that until January 2007, 37% of hospitals implement DOTS with the different quality. TB average ranks number 2 in the outpatient clinic at the General Hospital and rank number 1 in Lung Hospital. Nearly 6.5% of the cases the treatments of category II who failed treatment and showed MDR-TB (multidrug resistant TB) are found in hospitals. Various attempts have been made by the government to address TB among TB control is a global plan aimed at achieving global targets in line with the WHO TB DOTS (directly observed treatment, short-course) and a new stop TB strategy. According to Ministry of Health Republic of Indonesia in 2008 TB prevalence was 253 per 100,000 population while the MDGs (Millennium Development Goals) targets in 2015 for TB is 222 per 100,000 population means that it is the conditions in Indonesia closer to the expected target. In 2009 to reach 71% case detection and treatment success rate reached 90% (Kemkes, 2011).

Nurses has important role in facilitating therapy and shaping constructive behavior to patients with TB thus they were motivated to become adhere to treatment. Current discrepancy in TB treatment includes health education was held by nurses was less optimal at nurse-patient interaction to improve patients' adherence. The participation of nurses in government programs is indispensable in order to avoid treatment failure which led to the MDR-TB or XDR-TB. In addition to supporting the government's program, one of which is the program PMO, nurses need to perform an approach to patients in performing the adherence of treatment. Based on the fact mentioned above, a new approach focused on nurse-patient interaction system is needed. King's Interaction System Model can be used to improve nurse-patient interaction thus the patients' adherence to treatment improved.

Framework dynamic interaction system of King used as a theoretical framework in developing adherence improvement model that focuses on the dynamic interaction of personal systems, interpersonal system and social system in achieving the goal of increased pulmonary TB patient adherence. Personal system according to King describes the characteristics of the individual and the individual is seen as an open system (Alligood & Tomey, 2006).

### **MODEL DEVELOPMENT**

This model was developed through the stages of literature review, qualitative study and expert review. This model was developed to improve patient's adherence with pulmonary tuberculosis. Literature review was done to get a description of patient interaction systems to achieve adherence. Qualitative study with descriptive exploratory method produces an overall description of the patient's adherence based on personal system, interpersonal system and social system of nurse patient interaction systems on patients undergoing treatment in lung polyclinic. Qualitative analysis produced 12 theme expressed by participants (Tintin, 2015).

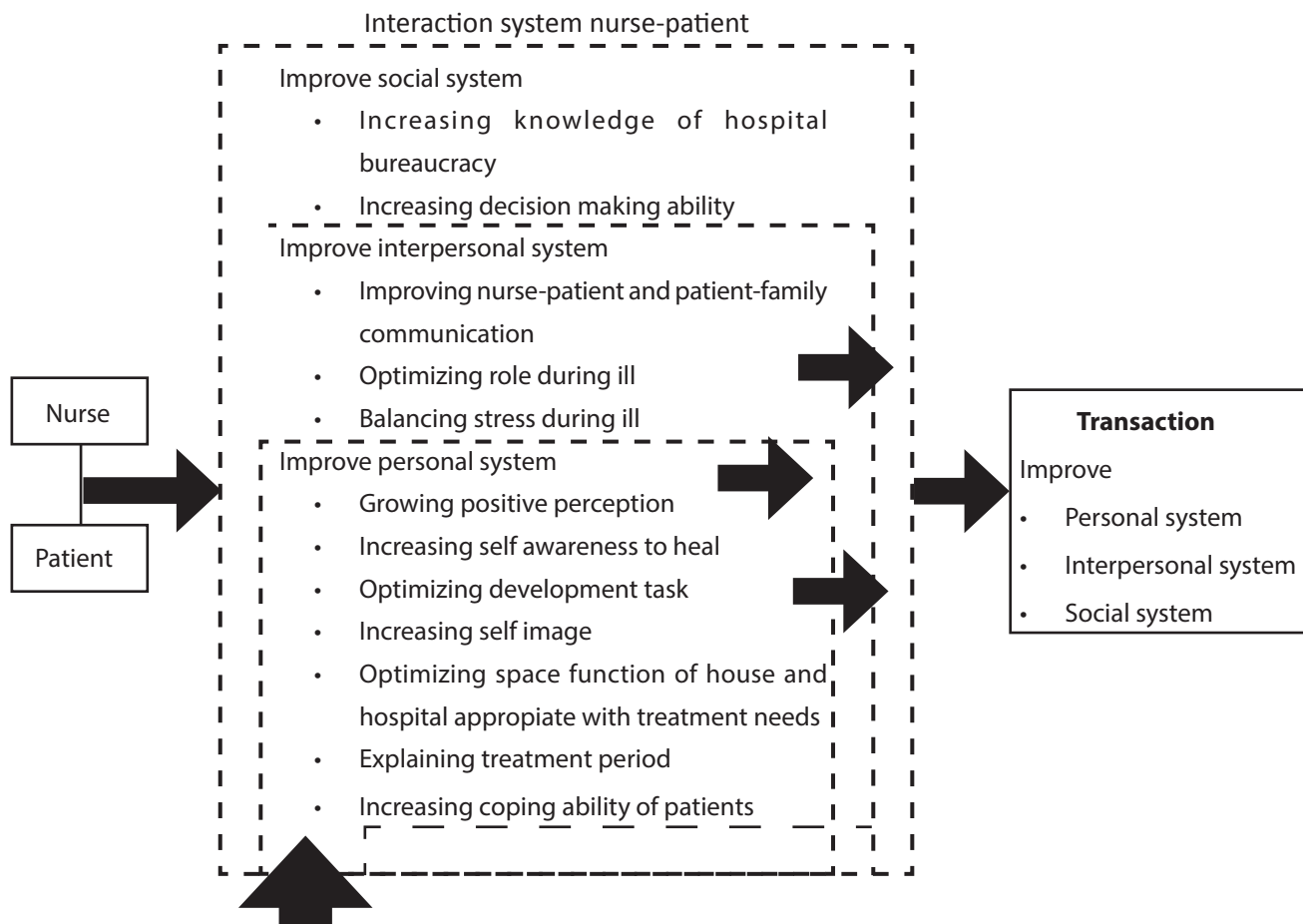
From research theme can be described personal system, interpersonal system and social systems of adherent patients. In a personal system, pulmonary TB patients adherent to have a positive perception, self-awareness to heal, optimal growth and development, positive self-image, a healthy environment, discipline to take medication and have effective coping. Adherent patients have a positive perception about the treatment of pulmonary TB, prevention of infection and proper nutrition to support healing. Patients also self-conscious if the disease is curable and diligent medical treatment must come alone though. Adherent patients had optimal growth and development because they still have hope of a better future and able to perform tasks in an optimal development. Patients have a positive self-image that is not ashamed to wear a mask and not be ashamed to lose weight. Patients discipline in take medication that is always taking the medication 1 hour before meals and use the alarm as a reminder. Patients also have effective coping during TB treatment because it is able to accept the conditions experienced and always think positive.

In the interpersonal system, adherent patients have open communication with health workers and families, able to perform its role optimally, able to balance the stress during illness. Patients said that during the illness and treatment always communicate and interact with nurses and doctors. Nurses and doctors being friendly and always open and listen to patients complaints and provide the required information. Families can receive the patient and always support the patient to undergoing treatment. During the treatment no obstacle is too meaningful role in school or work. Schools and offices receive permits for sick letter from doctors. Adherent patients say that at the beginning of treatment that causes stress was bored taking medication and back and forth to the hospital but over time lost and enjoy the treatment.

In the social system, adherent patients have knowledge about the healthcare bureaucracy at the hospital and able to take the decision to seek treatment in hospitals. Knowledge of the healthcare bureaucracy include knowledge services organizations in the lungs polyclinic, and knowing the power and authority of lungs polyclinic and patients are aware of his status as a patient who must adhere with hospital regulations. In the decision-making ability, adherent patients chose to continue treatment in the hospital because of the location closer of the house and the hospital had a doctor specialists and nurse specialists .

The next stage was the expert review that aims to get a review in order to obtain a model that is fit to be tested. Consultations carried out to nursing experts. The selected consultant was an nurse expert on pulmonary tuberculosis. The selected consultant as much as 3 people. The first step was to establish an expert chosen for consultation. After performing the contract for a meeting with the experts was then to explain the intent and purpose of the consultation. Consultation was done 1 time for each expert. Results from the expert consultation narrated, in the analysis and synthesis of the results of qualitative studies in order to achieve adherence improvement model based on King interaction system were fit and ready to be validation.

Scheme of interaction nurse-patient model based on King's interaction system model based on literature review, qualitatif study and expert review



## MODEL DESCRIPTION

Adherence improvement model based on King interaction model is a model that was developed to improve adherence in patients with pulmonary tuberculosis by improving nurse-patient interaction systems based on personal system, interpersonal system and social system of the patient. Learning media is made in the form of booklets representative and in accordance with the patient's level of understanding.

The focus of nursing at the personal systems of this model is to increase the personal systems of patients by increasing a positive perception, increasing self-awareness to heal, optimizing growth and development, improving self-image positive, optimizing healthy environment to support improving discipline to take medication and improving effective coping.

The focus of nursing of interpersonal system is to improving the nurse-patient and patient-family communication, optimizing the role of patients during illness and balancing the stress experienced by patients. The focus of nursing in the social system is to increasing patients' knowledge about the bureaucracy of hospital services and improving the ability of patients in decision making. All the above interventions aimed at achieving patient adherence in the treatment. Nurses as service provider, motivator, and educator for patients by improve the personal, interpersonal and social systems of patients.

## GUIDE OF MODEL IMPLEMENTATION

This guide describes the model interventional procedures performed by nurses to patients consisting of interventions to improving personal system, interpersonal systems and social system of the patient. Adherence improvement model based on King interaction system as a whole consists of eight meetings which is 5 times the provision of education in week 1, week 2, week 4, week 6 and week 8 and 3 times that of monitoring and evaluation in week 12, week 16, and week 20. Health education materials are prepared based on the patient's needs.

The model provided to patients is aimed to improving personal system, interpersonal system and social system of the patient. In this model consists of 8 sessions, namely from the beginning of patients diagnosed until the end of the 5<sup>th</sup> month of treatment. The first meeting in patients started at the beginning of patients diagnosed with pulmonary TB. At this meeting, needs to be improved in the personal systems are: creating a comfortable environment for the nurse-patient interaction in hospitals, improving a positive perception of pulmonary tuberculosis and increasing self-awareness to heal. At the interpersonal system that needs to be done at the first meeting is to improving the nurse-patient and patients family communication. In the social system, needs to be improved is to facilitate the patient's decision to run a treatment and improving knowledge about hospital services.

The 2<sup>nd</sup> meeting at the end of week 2 of treatment, at this meeting is improving the interpersonal system namely improving nurse-patient communication continuously and increasing the personal systems is to developing a positive perception by providing learning about the prevention of transmission and healthy environment for the healing of pulmonary TB patients. The intervention of social system is to explaining the healthcare bureaucracy by raising awareness of the patient will be his status as a patient to adhere with the rules of hospital. At the 3<sup>rd</sup> meeting, namely at the end of the 4<sup>th</sup> week is increasing interpersonal system that nurse-patient communication and improving personal systems that developing a positive perception by providing learning about the nutrients needed by patients with pulmonary tuberculosis. At a meeting at the end of 4<sup>th</sup> or 6<sup>th</sup> week is to improving personal systems that improving patient coping and the interpersonal system is to improving the nurse-patient communication and helping patients balance the stress experienced. At the 5<sup>th</sup> meeting or the end of the 8<sup>th</sup> week/end of the 2<sup>nd</sup> month, the intervention given the personal system is helping patients receive a positive self-image changes and optimizing the achievement of growth and development. Whereas the interpersonal system is to improving communication between the nurse-patient and helps patients optimizing role during illness. At the 6<sup>th</sup> meeting (end of 3<sup>rd</sup> month), 7<sup>th</sup> meeting (end of the 4<sup>th</sup> month) and the 8<sup>th</sup> meeting (late 5<sup>th</sup> month), the intervention focused solely to improving communication and interaction nurse-patient and monitoring of adherence patients.

Below is one example of intervention models:

STAGE OF INTERVENTION	PURPOSE	NURSING INTERVENTION	CONTENT	TIME	METHOD
	1. Improving self awareness to heal	1. Be sure the patient that the disease can be cured by showing patients who recover /almost healed, who was control in the hospital. 2. Discuss with the patient about resources system that help patients in treatment from internal and external patients. 3. Provide motivation for patients to continue treatment even have to attend alone to hospital		5–10 second	Interview and discussion

STAGE OF INTERVENTION	PURPOSE	NURSING INTERVENTION	CONTENT	TIME	METHOD
		4. Explain to the patient that his illness is not a curse or a punishment but as a gift from the God.			
		5. Be sure the patients that they not alone, but a lot of people have some disease and they can share experiences (show that patients who seek treatment in polyclinic have the same problem)			

### E. MODEL EVALUATION

Documenting the evaluation of the actions carried out after the intervention models to patients with pulmonary TB. The nurse recorded the final evaluation of the actions of each patient encounter. Patients were evaluated levels of knowledge, motivation, self-confidence, prevention of transmission, nutrition adherence and medication adherence (dose, time, method and withdrawal/drop out of treatment) using the format listed at the end of the book models. Patient treatment adherence was monitored by checking at the list taking the medication, the medication packs and the leftover of the medication then recorded and matched to the patient's TB-01.

### F. MODEL VALIDATION

Models were validated by conducting research on a quasi experimental toward pulmonary TB patients from initial diagnosis until the end of the 5<sup>th</sup> month of treatment during 8 times meeting. The intervention group was pulmonary TB patients seeking treatment in lung polyclinic Haji Surabaya Hospital and the control group were pulmonary TB patients who seek treatment at Ibnu Sina Hospital Gresik. From the results obtained that there were significant of knowledge, self-efficacy, motivation, prevention of infection and adherence nutrition. There was an influence on medication adherence on how to take medication but there was no difference in time to take medication and dosage. No difference drop out treatment between intervention and control group, but the intervention group no drop out, while in the control group there were 3 patients (6%) who drop out of treatment. Although looks small but that number can cause problems for patients who are at risk of drug withdrawal can lead to drug resistance and the spread of infection to others

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## EMPOWERING COMMUNITY FOR HEALTH: USA PERSPECTIVE

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Empowering patients and families to become active partners in their health is a critical step on the road to achieving quality health. The U.S. healthcare system aims to provide improved health experiences, better population health, and lower costs but must first have health professionals meaningfully partner with patients, families and communities. Engagement will bring patient and family voices to decisions about care, to healthcare organizational design and governance, and to public policy. Professionals who partner with clients have patients, families, and communities that make more informed choices about their care, use medications more safely, practice more effective self-management, contribute to infection-control initiatives, and help reduce medical errors. This provides measurable improvements in the quality and safety of care.

The Institute of Medicine recommends that encouraging patient engagement in care decisions, value, and research is crucial to achieving improved healthcare. According to the World Health Organization, community empowerment provides a process by which people gain control over the factors and decisions that shape their lives. This process builds capacity to gain access, partners, networks and/or a voice, to gain control over health. U. S. Healthy People 2020 report recognizes that social determinants contribute to negative health outcomes. Community empowerment addresses social determinates via social, cultural, political, and economic forces that underpin health.

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# CORRELATIONS BETWEEN NURSE'S KNOWLEDGE AND ATTITUDE IN COMPLETING THE PRAYER NEEDS FOR PATIENT AT PETROKIMIA HOSPITAL GRESIK

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## **ABSTRACT**

**Introduction:** Worship is the spiritual aspect. The aspect of religion is one of element to understanding the complex health. Spiritual needs is an abstract things and include one of the basic human needs. Through worship, patients can get peace of mind, enlightenment, and a sense of comfort. The aim of this study was to identify the relationship between the level of knowledge and attitude of nurses towards fulfillment the prayer need for a patient at Petrokimia Hospital, Gresik, East Java, Indonesia. **Method:** The design of this study was analytic correlation with *cross sectional* approach. The population in this study were all nurses at Gresik Petrokimia hospital and the number of samples were used 28 respondents, then the sample was selected according to the inclusion criteria. The independent variables was included the level of knowledge and attitudes of nurses. The dependent variable was the behavior of fulfillment the prayer needs of hospitalized patients. The data were collecting by questionnaires. Analysis of the data were used Spearman rank (Rho) with a significance level of  $p < 0.05$ . **Result:** The results showed the correlation between knowledge ( $\rho = 0.048$ ) and attitude ( $\rho = 0.043$ ). **Discuss:** It can be concluded that fulfillment of prayer needs in hospitalized patients have a relationship with the knowledge and attitudes of nurses. Further, the researcher recommend to provide and do give initial pray orientation for every new patient. Nurse can do the orientation in fulfillment of prayer needs which began introducing the direction of Qiblat, teach wudlu, how to pray in bed, and dzikir.

**Keywords:** *nurse, knowledge, attitudes, spiritual health, spiritual needs*

# THE CORRELATION OF TEAMWORK AND COMMUNICATION WITH PATIENT SAFETY IMPLEMENTATION BY NURSING STAFFS IN WEST NUSA TENGGARA HOSPITAL

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## **ABSTRACT**

**Introduction:** Patient's safety is a basic principal of health service. Safety is also a right for the patient in receiving health services. The change of health service paradigm from *safety* to *safety-quality* means not only to increase the quality but also keep patient safety. In 1999 the Institute of Medicine (IOM) in the USA stated that 44,000–98,000/death caused by medical errors. In indonesia since 2006–2011 adverse event obtained 249 reports, 207 reports for Nursing units, and 437 reports for Hospitalization. Some factors affected the implementations of patient safety by nurses, such as team work and communication. The purpose of this study was knowing the correlation between team work and communication by implementing patient safety implemented by nurses. **Method:** Research design used correlation analysis with cross sectional method involved 125 samples. **Result:** The study proved that team work has a correlation with the implementation of patient safety ( $p = 0.006$ ) and communication has a correlation with the implementation of patient safety ( $p = 0.026$ ). It's proved that teamwork and effective communication can increase the implementation of patient safety. **Discussion:** this study recommends to increase patient safety through the implementation of an effective communication to increase the implementation of patient safety.

**Keywords:** *teamwork, communication, patient safety implementation*

# THE CORRELATION OF ORGANIZATIONAL CLIMATE WITH JOB SATISFACTION OF NURSES AT THE GENERAL HOSPITAL OF MATARAM

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## ABSTRACT:

**Introduction:** Nurses are the majority of human resource in hospital and directly communicate with patient as receiver of hospital's service. So that nurse's performance will influence a good or bad from hospital services quality. Nurse's performance influenced of many factors, one of that is satisfaction. A good nursing's working climate in hospital could increase satisfaction and quality of nurse's performance. This study has been conducted in the in hospital care unit of RSUD Kota Mataram in order to know the correlation between hospital organization climate and nurse working satisfaction. **Methods:** Design of this study was correlational study with cross-sectional approach. The populations in this study were all nurses in the in hospital care unit of RSUD Kota Mataram, with the total sample were 48 people. The instruments were questioner. The analytic were used Pearson Product Moment. **Results:** The result of this study has shown that 68.7% nurses has intermediate perception of hospital organization climate, 25% nurses were still being not satisfy category, and there is no correlation between hospital organization climate and nurse working satisfaction ( $r = 0.249$ ). **Discussion:** Suggested to RSUD Kota Mataram to keep organization climate by define working standard not too high neither too low and by giving responsibility and independence to every nurse but still open to accept consultation if nurse meet some trouble on their work. And hopefully to more care about incentive distribution system for nurse satisfaction and increasing nurse motivation in RSUD Kota Mataram.

**Keywords:** *organization climate, working, job, satisfaction*



## INTRODUCTION

Hospital is an integral part of the overall healthcare system. Operation of hospitals is a capital intensive business, labor-intensive and technology-intensive. According to data from the Directorate General of Health Efforts Ministry of Health (Kemenkes), the number of hospitals in Indonesia has reached 1,959 units. Government hospitals as much as 785 units, consisting of the Ministry of Health as many as 40 units, 88 units of the Provincial Government, District Government 423 units, 89 units of the City Government, the Ministry of the other two units, 109 units of military and police 34 units. Private non-profit 699 units, 403 units of the private wings, BUMN 77 units (*kompas.com*, 2012). As an organization, the hospital has five organizational resources, namely: man, material (infrastructure), methods, money (cost), Quality. So it takes good management skills in managing resources above. Human resources are the most important thing in managing the hospital because the main function is to provide healthcare (Harrington Emerson in Phiffner John F. and Robert V. Presthus 1960). Nurses constitute the majority of human resources and that relate directly to patients as recipients of services the hospital. So the nurses will greatly affect the performance of both the poor quality of hospital services. The performance of nurses in hospitals is influenced by many factors, one of which is the satisfaction. Nurses are not getting job satisfaction will never achieve psychological satisfaction and ultimately there will be a negative attitude or behavior and in turn will lead to frustration. Instead satisfied nurses will be able to work well, energetic, active,

and able to perform better than nurses who did not get job satisfaction (Sutrisno, 2012). Climate of nursing work composed by nurse managers, which in turn determines the behavior of clinical nurses who practice in adjusting to the climate of the nursing work. Good nursing work climate in the Hospital will be able to increase job satisfaction and work quality nurses. Clinical nurses who practiced wants climate that will give them job satisfaction. They achieve job satisfaction when they are challenged and their achievements are known and appreciated by managers and patients. Furthermore nurses also want climate provide a good working conditions, higher wages, and opportunities for professional growth through counseling and career development experience that will enable them to establish and direct their professional future. Organizational climate is a series of descriptions of the organizational characteristics that differentiate an organization to another that leads to the perception of each member in view of the organization (Swansburg, 2001). Organizational climate are grouped into six dimensions: organizational structure, standards of performance, responsibility, recognition and respect, support, and commitment. The nurse in the inpatient unit tends to have a more complex problem than any other room in the hospital. Besides, had to face complaints from patients and their families, nurses also face specialists who possess diverse every day (Stringer in Wirawan, 2008).

Based on preliminary studies conducted in General Hospital of Mataram obtained information that had recently occurred

resignation of several nurses contract. Some nurses civil servants (PNS), which has been transferred from the hospital. However, the information obtained is not the cause of the phenomenon. The hospital has set SOP (standard operating procedure) but no follow-up on its implementation at the hospital. Nurses must report to the attending physician regarding some complaints experienced by the patient. It shows there is something in the hospital organizational climate. Based on interviews with 10 nurses obtained information about some of the complaints of nurses in the room: workloads that are not in accordance with the number of nurses, salary contracts is often too late, lack of attention to institutions of continuing education of nurses. Based on the information it needs to conduct further research on organizational climate perceived nurses as well as the extent to which the level of job satisfaction of nurses in connection with the organizational climate.

## METHODS

Research subjects in this study were nurses in the inpatient (IRNA) General Hospital of Mataram. The populations in this study were nurses in inpatient General Hospital of Mataram with a total of 69 people, divided into, IRNA III 16, IRNA II 12, IRNA I 13, IRNA VIP 13 people 69 people. This study uses cluster sampling and samples taken were nurses at IRNA III, IRNA II, IRNA I, and VIP General Hospital of Mataram. Large sample obtained amounted to 48 people. The total sample is divided by the proportion of each ward with the number IRNA III fourteen nurses, IRNA II 10 nurses, IRNA I 12 nurses,

and VIP 12 people. Inclusion and exclusion criteria of this study were the primary nurse and nurse associate, and not the nurse unit managers. This study uses a correlation study design that is seeking, explaining a relationship, estimating, and testing based on the theory that exists between variables. Judging from the measurement time of this study using cross sectional approach where the independent variable data measurement time (Organizational Climate Hospital) and dependent (Satisfaction of Nurses) only one at a time (Nursalam, 2011). Primary data obtained from answers to the questionnaires filled out by nurses inpatient hospital Mataram City. Secondary data were obtained through hospital management. This study uses a questionnaire research instruments. Questionnaires are a number of written questions used by researchers to obtain information about the characteristics of respondents required by the researcher (Arikunto, 2006).

The questionnaire of organizational climate consisted of 12 closed questions which was a modification of the questionnaire by Stringer (2002) and has been through validity and reliability. At the point 5,6,7,8, and 9 have a value of  $r < 0.25$ , which means invalid, it could be due to editorial questionnaires are poorly understood, editorial improvements have been made on these points. This questionnaire consists of two sub organizational climate variables, namely, standard and responsibility. Answers in a Likert scale consisting of four (4) options, namely, strongly disagree, tend to disagree, tend to agree, and agree and respondents were asked to mark a cross on the selected answer.

The questionnaire of job satisfaction consisted of 12 closed questions which was a modified questionnaire Jobs Description Index (JDI) according to Smith, Kendal and Hulin (1969) which has been tested for validity and reliability. This questionnaire includes two aspects, namely job satisfaction, pay and jobs. Answers in a Likert scale consisting of four (4) options, namely, very dissatisfied, dissatisfied, satisfied, and very satisfied, and respondents were asked to mark a cross on the selected answer.

Organizational climate data were processed using univariate analysis, the frequency distribution and percentage. The highest score was 24 and the organizational climate lowest score is 6 (six). Organizational climate are grouped into three (3) categories: 1) Both the total score of 36-48; 2) Enough with the total score of 24-35; 3) Less with a total score of 12-23.

Job satisfaction data processed by univariate analysis, the frequency distribution and percentage. The lowest score was 12 and the job satisfaction is the highest score 48. Then the scores are grouped into three (3) categories: 1) 12-23: dissatisfied; 2) 24-35: quite satisfied; 3) 36-48: satisfied.

## RESULTS

Based on the results of climate research organizations were grouped into three categories: 1) good; 2) sufficient and 3) less.

Table 1. Distribution of Organizational Climate Hospital

Organizational Climate	Amount (nurses)	Percentage (%)
Good	15	31,3
Enough	33	68,7
Less	0	0
Total	48	100

Based on the table, can be seen most of the respondents have Enough perception of organizational climate hospitals as many as 33 nurses (68.7%), 15 (31.3%) have a good perception of organizational climate hospital and no respondents who have a perception lack of organizational climate hospital.

Based on the results, the results varied from job satisfaction of nurses in inpatient hospital Mataram City. To more clearly seen in the following table:

Table 2. Distribution Nurse Job Satisfaction

Job Satisfaction	Amount (nurses)	Percentage (%)
Satisfied	5	10,4
Quite satisfied	31	64,6
Not satisfied	12	25
Total	48	100

Based on the table above can be seen most of the job satisfaction of nurses is in the category quite satisfied as many as 31 nurses

(64.6%), 12 nurses (25%) are in the category of not satisfied, and only 5 nurses (10.4%) were the satisfied category.

Data of hospital organizational climate and job satisfaction of nurses distributed using cross table. Distribution results can be seen in the following table:

Table 3. Distribution of Organizational Climate and Job Satisfaction Hospital Nurses

Organizational Climate	Job Satisfaction			Total
	Satisfied	Quite satisfied	Not satisfied	
Good	1 (2%)	11 (23%)	3 (6,3%)	15 (31,3%)
Enough	4 (8,4%)	20 (41,6%)	9 (18,7%)	33 (68,7%)
Less	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	5 (10,4%)	31 (64,6%)	12 (25%)	48 (100%)

Based on the Table 3, the majority of respondents have enough perception of the hospital organizational climate and job satisfaction in the category quite satisfied that as many as 20 people (41.6%).

Relations hospital organizational climate and job satisfaction of nurses were analyzed using Pearson Product Moment test. Statistical test results can be seen in the following table:

Table 4. Analysis of Organizational Climate Relationship with Job Satisfaction Hospital Nurses

	Organizational climate	Job satisfaction
Organizational climate	Pearson Correlation	.249
	Sig. (2-tailed)	.087
	N	48
Job satisfaction	Pearson Correlation	.249
	Sig. (2-tailed)	.087
	N	48

Based on the Table 4 can be seen the value of  $r = 0.249$  ( $r$  arithmetic  $<$   $r$  table), then  $H_0$  accepted, which means there is no relation hospital organizational climate and job satisfaction of nurses.

## DISCUSSION

Based on the results in Table 1 are obtained most of the respondents have enough perception of organizational climate hospitals as many as 33 people (68.7%). This is shown by the majority of nurses expressed tended labor standards set out in General Hospital of Mataram is high enough, that the hospital has set the standard of nursing care but there is no supervision which monitors and evaluates

the implementation of this standard so low. So also with responsibility, due to a fairly high standard work unsupervised but this resulted in lower responsibilities of nurses although it has been given the freedom to do nursing care.

Above results in accordance with the statement in Kosasih Stringer (2002) is not too high pressure is good enough for a hospital organization because if a hospital setting standards that are too high will cause high work stress and affect the services provided. Dimension of responsibility is a dimension that is difficult to determine for a hospital organization. This is due to caution in a healthcare nurses usually ask for advice or guidance from his superiors, and this will lower the score responsibility.

Based on the results of this study concluded that the standard dimensions have considerable value. This means that there is pressure from management to the nurses in inpatient hospitals Kota Mataram to always try to improve its performance, but the pressure is not too high. Dimension of responsibility in this study also had a considerable value. This means nurses on inpatient hospital Mataram City are encouraged to solve a problem independently or to try a new approach in solving a problem. However, employment standards and this responsibility needs to be monitored and evaluated by supervision in its implementation.

Based on the results in Table 2 is obtained there is in the category of nurses is not satisfied that 12 people (25%). This can be seen on most of the indicators of job dissatisfaction nurses comes from a lack of appreciation people or patients to the nursing profession

and the incompatibility of the workload with capabilities. As well as most of the points on the payment indicators leads to dissatisfaction on inpatient nurses. These include: the suitability of the salary received by the ability, working time is used, and education; incentive distribution systems prevailing in the hospital and the amount of incentive is not in accordance with the workload; as well as the facilities provided by the hospital to the welfare of employees. Nonetheless pride nurses with work still high. According Glimer (1996) the difficult tasks easy and pride will be able to increase or decrease satisfaction.

According to Gibson (2004) program effective payment of the achievements motivate employees because most people appreciate the value of money. Employees do not like when everyone receives the same increase, automatically given any achievements. Payments based on achievement provides an opportunity for employees to get more chances when doing so. Considerations in the payment is to be sufficient to meet basic human needs (such as food, shelter, clothing), deemed reasonable that employees tend to compare their payments with others regardless of the amount received if unfair then dissatisfaction will occur.

Based on the results of research and theory on the above it can be concluded that the emotional reaction of nurses in inpatient hospital Mataram City to the gap between impulse, desires, demands and their hopes to work with the perceived reality is quite satisfied. But still there are nurses who are dissatisfied and very few who feel completely satisfied.

Based on the results in Table 4 showed  $r = 0.249$  ( $r$  arithmetic  $<$   $r$  table), then  $H_0$  accepted, which means there is no relation hospital organizational climate and job satisfaction of nurses. This can be evidenced by although most nurses have enough perception of the organizational climate but there are nurses who are not satisfied. It can be caused by the current state of data retrieval when it is going problem of delay distribution of services. This greatly affect the outcome of job satisfaction in the dimensions of the payment that is largely in the category are not satisfied. This is in accordance with the Herzberg study in Gibson (2004) which states the existence of the payment and working conditions on job satisfaction is not always motivated, but nonexistence cause dissatisfaction for nurses.

Based on the results of the research, a good value on organizational climate does not always motivate job satisfaction of nurses, but the value is less on the organizational climate can lead to dissatisfaction for nurses. It can be seen from the fact even though the value of standard dimensions and responsibilities spelled out quite as well as their dissatisfaction on the payment indicator but on indicators of job satisfaction is quite high and nurses are still proud of their work. The absence of statistically significant correlation hospital organizational climate and job satisfaction of nurses also can be caused by the weakness of this study examined only two of the six dimensions of organizational climate that is standard and responsibility. As well as job satisfaction, the researchers examined only two of the five indicators of job satisfaction that the work and payment. So there are

many factors that can affect job satisfaction of nurses. Dimensions payment on job satisfaction is more influenced by the policies of the hospital in terms of salaries and the distribution system services/incentive that has been set.

## CONCLUSION

Established inpatient standards in the General Hospital of Mataram is quite high, but not accompanied by monitoring and evaluation of supervision, causing the value of responsibility is quite low even though the nurses have been given the freedom to implement nursing care. Most nurses are in the category fairly satisfied, but there is still a nurse in the category are not satisfied. Dissatisfaction mostly seen on the payment indicators are still far from the expectations of nurses, but of the indicators work, the nurse was still proud of his work. No association/relationship is very weak between hospital organizational climate and job satisfaction of nurses in inpatient hospital Mataram City. It appears that although the value of standard dimensions and responsibilities quite there yet discontent on payment indicator to indicator job satisfaction is quite high and nurses are still proud of their work.

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# APPLICATION OF SELF REGULATED LEARNING OF STUDENTS LEARNING ACHIEVEMENT IN NON-SCIENCE STUDENT

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## **ABSTRACT**

**Introduction:** Sisdiknas Chapter IV Section 5 in 2003, confirms every citizen is entitled to the opportunity to improve education throughout life. Pemkab Jombang School of Health Science provide equal opportunities to students with a background in science or non-science education that admitted in Nursing and Midwifery. The purpose of this study was to analyze the effect of SRL on student achievement non-science semester 2 in Pemkab Jombang School of Health Science. **Method:** This study design was quasy experiment with "pre-post test control group design". All non-science student in the 2<sup>nd</sup> half that department bachelor of nursing as a treatment group and department diploma of midwifery as an Independent control. Variabel group is Self Regulation Learning (SRL). Dependent variable is student achievement. The intervention was the students get modules SRL in the treatment group. Performance assessment with the GPA in semester 3. The data is processed and analyzed using paired t-test, the alternative hypothesis is accepted if  $p < 0.05$ . **Result:** The research result is a significant difference between pre and post students achievement Pemkab Jombang School of Health Science as a research subject, with a value of  $p = .000$ . **Discussion:** Specific targets to be achieved in this research is to improve the ability of the individual student in raising the learning potential that exists within. Another contribution of this study are expected by the model SRL will improve soft skills, shaping the character of the students who have high motivation for lifelong learning.

**Keywords:** *Non-science student, self-regulated learning, academic achievement, motivation, soft skills*



## INDRODUCTION

Nursing and Midwifery Education is a place to educate professional nurses and midwives are expected to meet the needs of the community. Therefore all related in the educational process should go well, including the prior knowledge. Prior Knowledge is one of the important factors that affect the quality of students in the learning process and affect the sustainability of long on student achievement. However, non-science majors have the same opportunities in the College entrance requirements, this is in accordance with the provisions of the National Education Section IV, Article 5 of 2003 which confirms every citizen is entitled to the opportunity to improve education throughout life. It was also valid in both majors Nursing and Midwifery Education at Pemkab Jombang School Of Health Science. Average GPA of study program Bachelor of Nursing dan midwifery Academic Year 2013/2014 showed the value of GPA While Student Non-science was below 3.00 and Science was above 3.00. This case shows that students with educational background Non-science should have a strong adaptive learning during the learning process. It improve student achievement Non-science requires a high learning ability, the process of thinking and self-motivation.

These capabilities in educational psychology named Self Regulated Learning (SRL). Zimmerman and Martinez Pons (2002) states that individuals have the SRL and believes that he is able to cope with the academic materials will have success and academic achievement higher than individuals who do not believe in her abilities. Various studies illustrate the importance

of SRL to improve business skills learning effective and efficient so we get a better performance (Desyanti, 2007). Another positive effect is obtained from the SRL is formed characters that have the motivation to learn throughout life (life long learning), and also become independent in various contexts of life.

Based on the above background, this study aims to prove the effect of Self Regulated Learning Model on student achievement Non-science at Pemkab Jombang School Of Health Science.

## METHOD

This research used quasy experiment design with "Pre Post Test Design. The population was all students Non-science Nursing and Midwifery semester 3 Academic Year 2014–2015. It was 62 students by using simple random sampling. The independent variable was the intervention of the Model Self Regulated Learning (SRL). The dependent variable was the achievement of student achievement Non-science. Students who have been assigned the respondents and fill Informed concent research. Before and after the intervention SRL, respondents assessed the motivation. SRL application was learning concept of SRL, socialization charging SRL module, through the provision to build motivation to learn, concept of how to learn effective and the evaluation of the charging module SRL. Descriptive by making the frequency distribution by category of each variable which includes gender, age, residence distance to campus. The second is a bivariate analysis using independent t-test, the alternative hypothesis is accepted if  $p <$

0.05. Before getting into the independent t-test test will first be tested normality data by using Kolmogorov Smirnov.

## RESULT AND DISCUSSION

GPA students bachelor of Nursing has range 1.44; mean 3.06, median 3.13, standard deviation 0.29, variant 0.084; minimum value 2.16 and maximum value 3.60. GPA students midwifery academic as a whole has a range of 0.72; the average value (mean) of 2.54, a median of 2.82, 0.28 standard deviation, variance of 0.03; a minimum value and a maximum value of 3.26 2.54

GPA bachelor nursing students at post intervention SRL, overall had a 1.36 Range; the average value (mean) of 3.12, a median of 3.19, 0.28 standard deviation, variance of 0.08; a minimum value of 2.24 and a maximum value of 3.60. GPA Prodi DIII midwifery students at post intervention SRL, overall had a 0.64 Range; the average value (mean) of 2.62, a median of 2.91, standard deviation of 0.16, a variant of 0.026; a minimum value of 2.62 and a maximum value of 3.26.

Based on t-test, it can be seen that there is a significant impact on student achievement outcomes, both of bachelor Nursing and Midwifery academic. This was demonstrated by the significant value of 0.000. The calculation proves that the application of the SRL can be effective in improving student achievement of Midwifery academic and bachelor Nursing, so it can be an alternative method of learning that can be applied by students and teachers to achieve the learning objectives.

Besides, both the GPA of data, researchers are also measuring the average

score of motivation to learn from the study program, before and after being given treatment. For Midwifery academic obtained an average score of motivation to learn is 86, comprising 12 respondents (38.7%) had low motivation and 19 respondents (61.3%) had high motivation and after treatment was 91, comprising 9 respondents (29% ) have low motivation and 22 respondents (70.9%) had high motivation, while for bachelor Nursing, obtained a score of initial motivation to learn is 85 to 14 respondents (45.1%) had low motivation and 17 respondents (54.8%) had high motivation and after being given the treatment is 90, comprising 10 respondents (32.2%) had low motivation and 21 respondents (67.7%) have a high motivation. This is proved by the application of Self Regulated Learning, can improve student learning motivation, with increased student motivation to learn, of course this had a positive impact on the behavior of the students in their efforts to improve achievement learn. This shows that the model SRL can improve the soft skills SRL, shaping the character of the students who have high motivation for lifelong learning, to be independent and not easily give up in various contexts of life.

Australian Journal of teacher education. Vol 37. 2012. Effect of Increased SRL opportunities on student teachers motivation and use of metacognitive skills. Emmy Vrieling, Theo Bastiaens, Sjef Stijnen. Motivation to learn, in based are elements that can not be separated from the SRL, as to be able to implement SLR well, students need strong motivation, as presented by Corno and Madinach 1983, Corno and Rohrkemper,

1985, that the SLR consists of three components, first, self-regulated learning includes students metacognitive strategies for planning, monitoring and modifying Reviews their cognition. Second students of management and control Reviews their effort on classroom academic tasks has been proposed as another important component, and a third important aspect of SRL that some researchers have included in their conceptualization was the actual cognitive, strategies that student can learn, remember and understand the material.

In SRL students needed to plan learning, and also evaluate their own, against the learning success, therefore, students with low learning motivation, it would be difficult to design, implement and evaluate the success of learning. motivation into its own impetus for learners to achieve the learning objectives. As revealed by Ormrod (2008) in his book *Psychology of Education*, that motivation is something that animate (energize), directing and maintaining behavior, motivation to make the students move, place them in a certain direction and keep them moving. Ormrod explanation shows that motivation is very important in learning, in addition, is basically for students there is a need for achievement/learning outcomes are good, because with a good study results, they can meet the demand for existence itself. As presented by McClelland (Sudrajat, 2008) who put forward the theory needs for learning outcomes which states that a person's motivation is different, according to the strength of a person's need for achievement. The need for achievement as (1) a desire to implement something a task

or a difficult job, (2) dominate, manipulate, or organize physical objects, people, or ideas to implement these things as soon as possible, according to the conditions prevailing, (3) to overcome obstacles, achieve high standards, (4) achieve peak performance for yourself (5) is able to win in competition with others, (6) improve themselves through the application of talent successfully.

There are many other factors beyond motivation may affect learning outcomes, as revealed by Slameto (2003), namely internal factors and external factors. Internal factors consists of three components, namely: 1) physical, which includes health and disability, 2) psychological, in this regard include intelligence, attention, interest, talent, creativity, maturity and readiness, 3) the fatigue factor, which can include fatigue physical and spiritual. As for external factors consist of three components, namely: 1) family factors that include how parents educate, relationships between family members, the house, socio-economic circumstances the family, understanding parents and cultural background, 2) school factors that include learning model, curriculum, teacher relationships with students, school discipline, teaching tools, school time, lessons above standard size, the state of the building, method of studying and homework. 3) community factors that include the activities of learners in the community, the media, friends hanging out, and shape public life.

Lecturer, not just to help students achieve the ultimate goal of learning, but it also has a duty to improve the achievement of students. Meanwhile, to improve learning achievement, lecturers are also required

to be a motivator for students. Because as described above, the application of Self Regulated Learning can improve student learning motivation and ultimately student achievement can be improved.

This shows that the SRL can be applied well to midwifery and nursing students, SRL would also be the answer to the low achievement and learning difficulties experienced by students of nursing and midwifery. Metropolitan Journal of Educational Research Consortium (MERC) Virginia Commonwealth University. Title Encouraging Self-Regulated Learning in the classroom: a review of the literature, by Sharon Zumbrunn et al. October 2011. The SRL is essential process (Jarvela and Jarvenoja, 2011; Zimmerman, 2008). It can help students create better learning habits and strengthen Reviews their study skills (Wolters, 2011), apply learning strategies to enhance academic outcomes (Harris, Friedlander, Sadler, and Graham 2005), monitor Reviews their performance (Harris et al, 2005) and Evaluate Reviews their academic progress (De Bruin, Thiede and Camp, 2011). With the implementation SRL, will help students overcome learning difficulties, because the students will learn to recognize his shortcomings in the learning process, so that students can plan how to learn, learning according to the schedule that has been prepared by the students themselves, and evaluate the extent of the progress of learning. If the SRL can be applied continuously and become a positive habit, then the resulting impact is quite good.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

Application of Self-Regulated Learning can be effective in improving student achievement Midwifery academic and bachelor of Nursing, so it can be an alternative method of learning that can be applied by students and teachers to achieve the learning objectives.

There is an increased motivation of students before and after applied SRL so that if it is applied continuously and become a positive habit, forming character and lifelong learning.

### **Recommendation**

This study focuses on solving learning problems in students especially those with non-science majors so hopefully with this SRL Model can be a solution for the learners to organize behavioral and learning environment around them to be independent in learning. This is especially for students with learning difficulties and for students who have a GPA below the standard.

It is also expected with the model SRL will improve soft skills, shaping the character of the students who have high motivation for lifelong learning, to be independent and not easily give up in various contexts other life, especially in the majors bachelor Nursing and Midwifery academic.

For Policy Makers Institute, this study may be a recommendation for decision making in the recruitment of new students to look at the educational background can affect the level of further education.

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# THE EFFECTIVENESS OF COACHING METHODS FOR IMPROVING SELF EFFICACY COMPETENCE STAFF NURSES: A LITERATURE REVIEW

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## **ABSTRACT**

**Introduction:** Coaching is one of educational methods, that knows by the clinical education, theory and the research shows the advantages of coaching even though trainee or coach. Self efficacy is a concept that defined as social theory learning, it means individual belief based on how the individual reach the specific level performance. **Methods:** Systematic Review used as the methods in here, there were 5 nursing journal in EBSCO, PubMed and science direct. The nursing journal have had extracted to separate data based on criteria and then done critical appraisal by CASP tools and JBI for experimental. **Results:** Coaching methods is effective for improving self efficacy competence nurses. This method effective to improve self confidence, empathy, and staff nurses skills. **Discussion:** Coaching methods can stimulate effectively of new knowledge, innovation, and harmonic relationships at works. Coaching methods is effective in improving self efficacy and staff nurses competency. Coaching methods more specific in improving quality nurses performance.

**Keywords:** *coaching, self efficacy, nurses*

# EFFECT OF POST CLINICAL DEBRIEFING IN ENHANCING CLINICAL DECISION MAKING ABILITIES OF DIPLOMA NURSING STUDENTS

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## ABSTRACT

**Introduction:** The goal of nursing education is to produce nurses who are caring and competent in making the right decision to ensure safe patient outcomes. Critical thinking and problem solving skills are required to meet the changing practice and increased demand of dynamic clinical environment in the 21<sup>st</sup> century. This study aimed to examine the effect of using post-clinical debriefing (PCD) as an educational intervention in enhancing the clinical decision making ability among diploma nursing students. This was because making improvement in nursing students' clinical decision making skills has been a difficult academic outcome to achieve, despite considerable research and a major focus topic for nursing education. **Method:** A quasi experimental design was used. Analogy-guided learning and guided reflection were included in post-clinical debriefing as treatment. Pretest & posttest was conducted among 133 Second Year Semester One Diploma Nursing students (experimental n = 64; control n = 69) in a public university. Application test using nursing process were used to measure their context specific clinical decision making skills. **Results:** Significant difference ( $p < 0.05$ ) in the intervention group was found in the dimensions of "hypothesis generation", "cue utilization" and "data gathering" within the framework of the nursing process which supported the hypothetical-deductive diagnostic reasoning theory. **Discussion:** The findings indicated there was room for the use of PCD for future educational intervention.

**Keywords:** *clinical decision making, post clinical debriefing, student nurses*



# NURSING STUDENTS' ATTITUDES AND INTENTIONS TO WORK WITH OLDER PEOPLE

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## **ABSTRACT**

**Introduction:** The purpose of this study is to assess the knowledge, attitudes and working intentions towards the care of older people among nursing students in Malaysia. Furthermore to explore approaches to gerontological nursing education that influences nursing students' intentions to work with older people. Nursing students are future workforce in healthcare services. Being aware of nursing students' attitudes and working intentions toward older people would provide valuable insights to nursing education and practice. This study is underpinned by the Theory of Planned Behaviour (TPB) to explore the relationships between the three conceptually independent determinants of intention, which are attitudes, subjective norms and perceived behavioural control. **Method:** A systematic review concerning measurement instrument of nursing students' working intentions toward older people will be conducted. As informed by the results of systematic review, psychometric properties, validation and reliability test of the selected intention measurement instrument will be carried out. The study will adopt nationwide cross-sectional design. Multi-stage sampling is used to select participants from public and private nursing education institutions in Malaysia. The sample size representative of the student nurses is 1500. Four instruments are used for this study: the Kogan Attitudes Toward Old People Scale (Kogan, 1961), the Palmore's Fact on Aging Quiz (Palmore, 1988), The Intent to Work with Older People Scale (Nolan et al., 2002) and researcher developed questionnaire on measuring of subjective norms and perceived behavioural control. The findings of the study would certainly draw implications for nursing education, nursing practices and research in Malaysia.

**Keywords:** *nursing students, knowledge, attitudes, intentions to work, care of older people*

# LESSON LEARNT FROM JAPAN-ASIA YOUTH EXCHANGE PROGRAM IN SCIENCES AT HIROSHIMA UNIVERSITY 2015

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## **ABSTRACT**

**Introduction:** Science and technology in Japan has reached an advance level. Advanced technology also increase opportunity to do more researches and develop a sophisticated new technology for human. Unfortunately, not every country in the world experiences the same situation. Indonesia was one of the countries that still having difficulties in increasing the number of researches and quality, also the technology that being use and produce. To limit the gap between Japanese scientist and Indonesian scientist, Japan Science and Technology (JST) established program called Japan-Asia Youth Exchange Program in Science. The program also named as JST Sakura Science Plan. **Methods:** JST announced the plan at their website and interested Japanese Universities and Universities in Indonesia should be applied separately. Hiroshima University contacted Universitas Airlangga and discuss about the same interest in applying the plan. Both universities then discuss about the program they would run and applied. Scholars of the program were chosen by both universities by specific criteria and their scientific articles. It included two young scientists from Faculty of Nursing Universitas Airlangga and 7 others from many developing countries in Asia. **Results:** The program start with attending 6<sup>th</sup> Hiroshima Conference on Education and Science in Dentistry for three days, also did paper presentations at the conference. Besides doing presentation at 6<sup>th</sup> Hiroshima conference, scholars need to make an oral presentation at Hiroshima Peace Seminar. Besides doing activities at seminars, scholar was brought to modern Dental companies and Japan National Science Museum that implemented developed science and technology in Japan. **Discussion:** As scholars, we learnt about different scientific fields, research methods, and education approaches that have been implemented in dentistry. We also gain knowledge about culture and tradition of Japan. Meeting with other scientist and discuss about lots of subject related to science gave us new insight on how we perform research, education, and also clinical practice. Sakura Science Plan gives opportunity to scientists from many countries and universities to make communication, collaboration, and expand interprofessionals networking.

**Keywords:** *dentistry, education, interprofessional, research, scholar*

# NEED ANALYSIS AND SITUATIONAL ANALYSIS: DESIGNING ESP CURRICULUM FOR INDONESIA NURSING STUDENTS PRE INTERMEDIATE LEVEL

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## **ABSTRACT:**

**Introduction:** The objective of this study was to assess the English Specific Purposes needed by the nursing students at Faculty of Nursing University to design ESP Curriculum for Indonesia Nursing Students to prepare them to work at any International Hospitals around the world. **Methods:** This study employed data analysis to some researches from some different countries. Qualitative research was applied to this library research. Jossiane Gass described her study that Thailand has main problem for their nurses, speaking English. Nevertheless, she only analyzed the nurses' needs for communication in learning English. Her finding clarifies it by overcoming it practically. Other study stated by Misuzu Miyake and John Tremarco. They studied need analysis for nursing students by utilizing questioner and interviews. They found that part of Japanese nurses only speak English generally, as they are mostly from Philippine. They could not conduct conversation related with healthcare needs and they do not know Japanese culture. Whereas, Richard Cameron studied about need analysis for nursing students in class and clinic. His finding indicated that nursing students should be well to do some skills in class and clinic, skills, which will support their works later in hospital. The skills are focusing on three domains; English for specific purposes, hospital language, and cultural aspects of patient care. Fereshteh Jalali-Grenier suggested to nursing university to set a program that can greatly increase the retention of ESL students, in such a way that ESL students can overcome difficulties in learning healthcare through English. Sismiati's study found a way in developing instructional material on English oral communication. On the contrary, Afifah and Nurul studied about teachers' role in teaching speaking to nursing students. This library research attempts to achieve the beneficial parts of learning English to nursing students in Indonesia. Those previous researches are well observed and analyzed to take some parts which is proper to be applied in Indonesia, to prepare the nursing students to face their English based healthcare skill. **Results:** Thailand nurses are being well prepared by the nursing faculty to gain good communication skill. Japanese also does straight recruitment system to work applicants from other countries. Those countries where the research took place realize that their nurses need English conversation

skill not only to have communication with patient, doctors or partners but also in document works, such as medical record. Moreover it is not just English to be mastered by the nurses but also English to know their culture to give best services to patients. **Discussion:** The previous research which were analyzed in this research end to the conclusion that English for Professional Nurse in the intermediate level should be supported with good lexical and understandable meaning to collaborate the culture so the nurses can give proper treatments to fulfill patient needs.

**Keywords:** *nurses, students, curriculum, communication, english*

# JOINT DECREE 4 MINISTER (SURAT KEPUTUSAN BERSAMA 4 MENTERI) STILL RELEVANT? (Policy Analysis In Implementing School Health Unit/ UKS)

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## ABSTRACT

**Introduction:** Schools have a role and strategic position in efforts to improve health. This is due to largely children aged 5–19 years exposed with educational institutions in the long term. Various research shows the prevalence of the disease in school-age children, such as worm infection to unhealthy behavior problems in school children. School Health Unit (*Usaha Kesehatan Sekolah* [UKS]) that aims to improve the health behaviors of the students has been developed for a long time. It is strengthened with the establishment of the steering committee for UKS at all levels of government about the year 1984. Joint Decree (*SKB 4 Menteri*), namely the Minister of Health, Minister of Education, Minister of Religious Affairs, and Minister of Internal Affairs in 1991 issued within the framework of the promotion and development of UKS in schools from kindergarten, elementary, middle and high school. Results of research by several researchers demonstrated that it is not optimal role of the steering committee in coaching UKS. **Method:** This paper is descriptive analysis to analyze the role of the steering committee and the effectiveness and relevance of *SKB 4 Menteri* in the formation and development of UKS. UKS as one of the efforts in the subsystem health services has not been implemented optimally, as well as *SKB 4 Menteri* as one of the rules in the promotion and development of UKS. **Results:** Results of several studies indicate performance and coordination among the steering committee has not been reached optimally, as well as between the steering committee and UKS's Executive Team at school. Research also shows the lack of knowledge, attitude and action of the element/member of the steering committee. **Discussion:** Implication for UKS program is the need for a review of the relevance of the *SKB 4 Menteri* on the implementation of UKS, as well as the need to review the elements in this decree.

**Keywords:** *health services policy, UKS, SKB 4 menteri, steering committee*

# BURNOUT SYNDROME AMONG NURSES, THE CAUSE AND THE IMPACT

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## **ABSTRACT**

**Introduction:** The incidence of burnout syndrome in professional nurses are still very high. The incidence of burnout syndrome in Indonesia we can see from the incidence of burnout syndrome in RSAB Harapan Kita, the result of 60 nurses inpatient unit, 20% in the category of high, 55% in the medium category, and 25% for the low category. Nurses who work in the outpatient unit of 60 people, showed 20% for the high category, 61.7% medium category, and 18.3% for the low category. This study was aimed to determine the causes and impact of burnout syndrome in Indonesia and other countries. **Method:** This was a literatur review that tries to dig more information about the causes and effects of burnout syndrome in nurses by analyzing journal in English and Indonesian that are relevant to the keywords. **Result:** Burnout syndrome can cause by personal and environment factors. The personal factors consist of personality, expectations, and psychological. Environmental factors consist of a style of leadership, workload, and work environment. Burnout syndrome can lead to a lot of negative things on the nurse. Burnout syndrome can cause infections, turnover, and absenteeism. Burnout syndrome can decrease with belief in self-efficacy. **Discussion:** Burnout consists of three things emotional exhaustion, depersonalization, and reduced personal accomplishment. Factors that influence the occurrence of burnout is personal and environmental factors. Improved burnout syndrome in nurses can increase infections both urinary tract infections and surgical wound infections, turnover, absenteeism.

**Keywords:** *burnout syndrome, nurse, cause, impact*

## INTRODUCTION

Nurse is a person who has passed the Nursing higher education, both domestic and abroad are recognized by the Government in accordance with the provisions of legislation (Undang-Undang Keperawatan Republik Indonesia, 2014). Nurses, who work in the hospital, are often met with a variety of patient characters and the disease suffered by the patient, it can make the nurse suffered both physical, mental, and stress (Yuliastin, 2009). Burnout syndrome is a response to a situation that demands emotionally with the demands of the recipient of the service who require assistance, aid, attention, and care from caregivers. Burnout has three dimensions, the first emotional exhaustion, on these dimension will feeling frustrated, hopeless, depressed and shackled by the work. The second dimension is depersonalization, in this dimension will appear negative attitude, rude, and do not care about the environment and the third dimension reduced personal accomplishment, this dimension will be marked by a disgruntled attitudes towards themselves, work and even life (Maslach, 2001).

The incidence of burnout syndrome in professional nurses are very high. Severe emotional exhaustion obtained 25% (169 nurses) from 676 respondents, 32% (216 nurses) suffered severe depersonalization, and 45% (304 nurses) have low achievement (Canadas-De la Fuente, et al, 2013). Nurses, who work in the emergency room, as many as 61 nurses, obtained 8.2% of nurses experienced burnout, 54.1% had a high risk of burnout, and only 37.7% have a low risk for experiencing burnout (Jodas and Haddad,

2008). Burnout syndrome can occur not only in the nurse in the emergency room, but also can occur in the other units, such as ward units and outpatient units. The incidence of burnout syndrome in RSAB Harapan Kita Jakarta, the result of 60 nurses inpatient unit, 20% (12 nurses) in the category of high, 55% (33 nurses) in the category of medium, and 25% (15 nurses ) for the low category. Nurses who work in the outpatient unit of 60 people, showed 20% (12 nurses) for the high category, 61.7% (37 nurses) medium category, and 18.3% (11 nurses) for the low category (Mariyanti & Citrawati, 2011).

Burnout syndrome is a serious problem experienced by a person with the various aspects of the profession that is caused by pressure on themselves, either from internal or external. The core issue of the case of burnout syndrome is a condition of unconsciousness someone that actually he was experiencing burnout syndrome. Therefore, the identification about burnout syndrome was very important, as preventive measures to minimize the heavier direction, namely stress. On the one hand, burnout-related research continues to evolve with the results tend to vary according to the existing situational and on the other side of the implications of research for social applications is also important, so that it is able to bring new approaches suit different observations to reduce the occurrence of burnout syndrome itself (Senter, et al., 2010).

The conditions such as physical and emotional exhaustion, negative self-esteem development, and decrease in working attitude is what ultimately could be a trigger

stress on nurses, which if it can not be immediately addressed properly, it will cause the emergence of excessive stress, where expectations are not accordance with reality, makes nurses become tired and exhausted, both physically and psychologically, so that it can interfere with the performance of his work, this is what is called burnout syndrome. However defuse tension and fatigue (burnout) is not easy. Many individuals, is no exception to the nurse, who was pessimistic can solve problems that affect the ability to achieve targets or performance. It would be require the individual to the level of self-efficacy high to perform all the duties and responsibilities as a nurse. High self-efficacy can help nurses to overcome the pressures and the obstacles encountered in the hospital, so that it can reduce stress will even prevent the onset of burnout syndrome (Jerusalem & Mittag, in Bandura, 1997).

The concept of self-efficacy is belief in yourself to face and solve problems effectively. Self-efficacy also means believing themselves capable of luck and success. Individuals with high self-efficacy is committed to solve the problem and will not give up when it finds that the strategies that are being used that does not work (Reivich and Shatte, 2009). Belief in self-efficacy is required by a nurse because it can influence in solving various problems related to care for patients. In accordance with that proposed by that nurses with high self-efficacy are able to manage stress by directing their efforts on problem resolution. In contrast, nurses who do not have the self belief efficacy will try to avoid settlement problems (Chwalisz, Altmaier, and Russell in Bandura, 1997).

## **METHODS**

This study is a literatur review that tries to dig more information about the causes and effects of burnout syndrome in nurses by analyzing journal in English and Indonesian that are relevant to the keywords "nurses", "burnout syndrome", "cause" or "impact".

## **RESULT**

The results are burnout can caused by perfectionist personality, introverted, low self efficacy, psychological factors, psychological work environment, environment factors such as workload, and leadership. Burnout also can increase infections, both urinary tract infections and surgical wound infections, absenteeism, and turnover.

## **DISCUSSION**

### **The causes of burnout syndrome**

Burnout consists of three things: emotional exhaustion, depersonalization, and reduced personal accomplishment. The cause of fatigue can be classified into personal and environmental factors. Perfectionist personality, and depression experienced by nurses can increase the risk of burnout (Gul, et al, 2014). Another personality factors that may increase the incidence of burnout syndrome in nurses is introverted and extroverted personality. Personality nurses leads to an introverted personality are more prone to burnout than nurses with extrovert personality tendencies (Arifianti, 2012). Self efficacy nurse participated affect burnout in nurses, nurses with high self-efficacy, will reduce burnout (lailani, 2012).

The nurse psychology factors may be the cause of nurses experienced burnout.



The psychological factors, such as stress in employment, will be increased. The higher work stress experienced by the nurses, will lead to a high risk of burnout (Prestiana & Purbandini, 2012). Other psychological factors are psychological work environment. Psychological work environment that involves observation of the process of cognition and affective psychological conditions in the neighborhood nurse, dealing with superiors, co-workers, which may affect the remuneration of nurses in performing their duties. Increasingly negative perception of the psychological work environment, the higher burnout, and vice versa the more positive perception of the psychological work environment, the lower burnout (Khotimah, 2010).

Environmental factors include the workload. Excessive workloads would cause burnout. The excessive workload include hours of work, the number of individuals who have served, responsibility that must be borne, routine work and are not routine, other administrative work that goes beyond the capacity and ability of the individual. Excessive workloads cause caregivers to feel emotional tension when serving clients so as to direct the behavior of service providers to withdraw psychologically and avoid engaging with clients. Research conducted on nurses in Victoria said that the reduction in working hours and an increase in age, can lead to lower levels of emotional and depersonalisation. Further analysis states that nurses often work overtime voluntarily did not differ with nurses working not overtime (Patrick & Lavery, 2006). Ebling, Carlotto (2012) There is a relationship between burnout

syndrome, sociodemographic, employment, psychosocial, strong personality, and common mental disorders. Burnout can be influenced by social support. Influential social support is a vote of support from colleagues, support from superiors assessment, support information from colleagues, emotional support from colleagues, instrumental support from superiors and colleagues, as well as emotional support from family (lailani, 2012).

Burnout syndrome can cause by the leader. The leadership of supervisors increased the incidence of burnout in employees (Rivera, et al, 2013). Transformational leadership style burnout this is because the lower the transformational leadership style can enhance the efficacy of each individual. Supervision is done by the leaders also can indirectly affect the incidence of burnout (Kim & Lee, 2009).

### **The impact of burnout syndrome**

Burnout syndrome can lead to a lot of negative things on the nurse. Burnout syndrome can cause infections, both urinary tract infections and surgical wound infections. Nurses, who experience fatigue or burnout syndrome, are low (30%) resulted in a decrease in the infection as much as 6,239 in one year (Cimiotti, 2012). Research conducted by Japanese nurses about burnout states that burnout can affect the turnover of nurses, the lower burnout can decrease the incidence of turnover (Ohue, et al, 2011). Research conducted in Spain and countries in Latin America (such as Argentina, Mexico, Ecuador, Peru, Uruguay, Colombia, Guatemala, El Salvador, etc.) on

11 530 (with details of 7503 from Argentina, 1125 from Mexico, 593 of Ecuador, 494 from Peru, 305 from Uruguay, 337 from Colombia, 199 from Guatemala, 175 from Spain, 121 from El Salvador, and 678 from other countries) health workers mentioned that burnout syndrome, especially on emotional exhaustion component impact on the case absenteeism, with the intention of giving up the profession, deterioration of personal, and family deterioration, while the components of depersonalization was most associated with the perception of having made mistakes (Suner-Soler, 2014).

## CONCLUSIONS

Burnout consists of three things emotional exhaustion, depersonalization, and reduced personal accomplishment. Factors that influence the occurrence of burnout is personal and environmental factors. The personal factors consist of personality, expectations, and psychological. Environmental factors consist of a style of leadership, workload, and work environment. Improved burnout syndrome in nurses can increase infections both urinary tract infections and surgical wound infections, turnover, absenteeism.

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# DIABETES MELLITUS: CORRELATION BETWEEN SENSORY KNOWLEDGE, SELF-AWARENESS, SELF-CARE PRACTICE AND QUALITY OF LIFE

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## **ABSTRACT**

**Introduction:** Diabetes Mellitus (DM) has many clinical manifestations and complications that lowering health-related quality of life (HRQOL). This study aimed to identify and analyze the correlation between sensory knowledge, self-awareness, self-care practice, and HRQOL in DM context. **Method:** This is a cross-sectional study mixing the model of Self-care and Precede Proceed. The population was all DM clients in Keputran sub-district, sample amount was 32 enrolled by means of convenient sampling. Independent variables: sensory knowledge, self-awareness; dependent variables: self-care practice, HRQOL. Instruments used were sensory knowledge and self-awareness questionnaire, Self-Care Inventory-Revised Version and WHOQOL-BREF. Data analysis was using Pearson Correlation statistical test;  $\alpha \leq 0.05$ ; CI 95%. **Result:** 32 respondents participating in this study, equal number for males and females (50%), average age was 54.4 years old. Most of them are high school graduates, get married, and still working. The range of DM sickness was 1–26 years. Most respondents have enough sensory knowledge and self-awareness, but their self-care practice and HRQOL are not optimal. Statistical analysis showed that there was no correlation between sensory knowledge and self-care practice ( $p = 0.165$ ), between sensory knowledge and HRQOL ( $p = 0.097$ ), and between self-awareness and self-care practice ( $p = 0.714$ ). There is a weak significant correlation identified between self-awareness and HRQOL ( $r = 0.354$ ;  $p = 0.047$ ). **Discussion:** Self-awareness proved to be correlated with HRQOL in DM context, but other variables were unproved to be correlated. Self-care practice is not only influenced by sensory knowledge and self-awareness, but also many other unidentified factors involved.

**Keywords:** *Diabetes Mellitus, sensory knowledge, self-awareness, self-care, quality of life*

# PULSE OXIMETRY UTILIZATION AND OXYGEN WEANING DECISION TO CHILDREN PATIENT WITH ACUTE ASTHMA ATTACK AT EMERGENCY UNIT

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## **ABSTRACT**

**Introduction:** Emergency nurses's somehow actually have lack of knowledge performing pulse oximetry utilization and decision made when an oxygen weaning is done especially for those patient's who are suffered from acute asthma attack. **Method:** The used method was by collecting and analyzing related textbook and articles with pulse oximetry and decision of oxygen weaning at children with acute asthma attack. The literatures were obtained from textbook and electronic articles such as ScienceDirect, World Health Organization, Google Scholar, PubMed and ClinicalKey with textbook and article criteria that were published from 2000 to 2015. **Results:** Pulse oximetry utilization based on asthma attack level to children. The attack level is divided into 3, mild, moderate, and severe. The asthma attack level can be classified based on the symptoms that can be seen by GINA guidance (2015) or by using PRAM (Pediatric Respiratory Assessment Measure) score. Mild asthma patients without oxygen administered will be examine by pulse oximetry every four hours, however, for those with oxygen administered will be set up pulse oximetry every two to four hours. For moderate attack, the pulse oxymetry examination had done in each two to four hours within stable condition, if it didn't stable the pulse oximetry should be installed continuously. While the severe asthma attack level, the pulse oximetry should be installed continuously for monitoring SpO<sub>2</sub> and breathing status. The oxygen weaning decision is done at SpO<sub>2</sub> > 91%. At SpO<sub>2</sub> 91% level then O<sub>2</sub> is still installed and SpO<sub>2</sub> reexamination in 60 minutes. If SpO<sub>2</sub> < 91%, then the O<sub>2</sub> giving can be increased up to SpO<sub>2</sub>>91% and rechecked in next 15-60 minutes. **Discussion:** Pulse oximetry provide information to SpO<sub>2</sub>, further it can be used as evidence based in giving appropriate oxygen during stable condition as a guidance in the oxygen weaning.

**Keywords:** *pulseoximetry, asthma, emergency*

## INTRODUCTION

Acute asthma attack is a characteristic of disease with recurrent attack episode, breathlessness and wheezing with varied frequency and level for each children. Asthma attack are usually occurred because of long term asthma management failure or the presence of trigger factor exposure. The acute asthma attack is one of medical emergency or life threatening condition that are able to cause failure up to the death of the children that can be found in the emergency unit. (WHO, 2015; Camrigo & Rowe, 2014)

Asthma is including five most deadly diseases in the world. About 235 million people attacked by asthma in the world and 10% of those are children (WHO, 2015). In the US, 12.8 millions attacked by asthma each year with prevalence mostly children of 5–17 years old and about 640.000 children taken to the emergency unit (Nowak & Tokarski 2014). While in Indonesia, according to Health Department of Indonesia (2010) showed that asthma is part of 10 deathly and painfully diseases. For about 10% from 25 million of Indonesian's population suffer from asthma and the occurrence of these diseases in children is about 10–85% higher than those adult.

Signs and symptoms that often occurred in acute asthma are dyspnea, tight chest feeling, wheezing, breathlessness, unable to talk, the existence of accessory and expiration muscle. If these condition's develop rapidly without an appropriate treatment, within several minutes that can be caused life threatening. The children even looks so pale, cyanosis, sweating, confusion and sleepy that finally fall into hypoxia, hypercapnia and

respiratory acidosis. Within this condition, the patient should be brought into emergency unit to get promptly and properly treatment. (Silverstri 2011; Pollart et al, 2011)

In emergency unit, assessment is needed in order to obtain comprehensively status especially for breathing status and patient oxygenation. It is important to note that low level oxygenation in blood may also influence both organ which are heart and brain (Fahy et al, 2011). Oxygen saturation correlates to adequacy status of patient breathing that can be measured by pulse oximetry (Camrigo & Rowe, 2014; Nitzan & Nitzan, 2013). Pulse oximetry is devices that generally used to patient treatment standard in the emergency unit, critical care and surgical operation room to measure oxygenation level such as hypoxia (Keahey et al, 2002). Pulse oximetry is one of non-invasive devices that are easy, simple, and reliable to perform it. As well as to knowing the real change of oxygenation status, intervention efficiency and diseases progressing process. (Exadaktylos et al, 2014; Lee et al, 2000; Martin et al, 2015; Keahey et al, 2002)

Pulse oximetry is very helpful to diagnosed and to patients treatment in the emergency unit. Especially, for patient's evaluation with acute asthma attack as well as it's complication. It is also can be used as a reason to giving an appropriate oxygen, when it should be given or weaned and to assessing oxygen therapy successfully (Keahey et al 2002; Fahy et al 2001). According to Hassan et al (2008) showed that pulse oximetry as a foundation to determine oxygen saturation monitoring that suitable with the asthma attack or wheezing. Others said that pulse

oximetry is recommended for patient performing hemodynamic monitor, pre-operative patient and patient in emergency unit (Levin et al (2001). Holburn & Allen (1989) in Simon & Clark (2003) reported that pulse oximetry significantly has changed medical therapy for acute patient in the emergency unit and reduced arterial blood gas analysis up to 37%. Even the newest study stated that in emergency unit, therapy for acute asthma attack has changed because of pulse oximetry (Keahey et al, 2002).

Conventionally the pulse oximetry to measure arterial blood oxygen saturation that is calculated in percent between oxyhemoglobine concentration in blood that used as reliable indicator for disease level that relate with ventilation and perfusion (DeMeulener 2010; Elliot et al, 2006; Martin et al 2015). The higher oxygen concentration carried in blood to tissues showed the more adequate ventilation and the higher SpO<sub>2</sub> percentage with the more accurate examination (Jo Grap, 2002).

Pulse oximetry is accurate and reliable to read SpO<sub>2</sub> between 70–100%, with oxygen saturation difference of examination results by using arterial blood gas is 2% above or 2% below. But the device less accurate it is used for patient by using nail polish, artificial nail, has low hemoglobin content, hypothermia, poor tissue perfusion, clammyness, irregular bradycardia and arrhythmia as well as in patient with low saturated oxygen or under 80% or with very black skin (De Meulenaere, 2010, Simon & Clark, 2003, Fahy et al, 2011) In fact, in the emergency unit nurses or health care practitioner have lack of knowledge to using pulse oximetry especially for children

with acute asthma attack. Based on study done by Papovich et al (2004) in Elliot et al (2006) stated that only 26% of pediatric nurses and 60% medical resident that understand about the use of pulse oximetry. It is affirmed by Davies et al (2003) in Elliott et al (2006) and Jo Grap (2002) should that only 29% nurses in emergency unit understand using pulse oximetry and only 36% of nurses had gotten training of pulse oximetry. On the other hand, Jo Grap et al (2002) revealed that pulse oximetry has been used by 87% nurses to asses' patient status regularly.

Because of that, it is important especially pulse oximetry in children with acute asthma attack, however many nurses had lack of appropriate knowledge to using it. Further, this literature review will discuss in detail about the use of pulse oximetry and the oxygen weaning decision for children with acute asthma attack in the emergency unit.

## METHODS

Method used in the literature review was collecting and analyzing related textbook and articles with the use of pulse oximetry and the decision of oxygen weaning at the children with acute asthma attack. The literature was obtained from textbook and electronic article such as ScienceDirect, World Health Organization, Google Scholar, PubMed, and ClinicalKey with criteria of textbook and article which are published from 2000 to 2015.

## RESULTS

Performing pulse oximetry towards children are based on asthma attack level. According

to Global Initiative for Asthma (GINA) (2015), asthma attack level divided into three which are mild, moderate and severe. According to GINA (2015) asthma attack level diagnosed asthma attack derive from sign and symptom. Children can be diagnosed as experience mild asthma attack if they are conscious, active, without any retraction and respiration rate wide range from normal to slightly increase. While those children with moderate asthma attack, will look alike conscious, able to open eyes, heart rate less than 200x/minutes (age 0–3 years old) or less than 180x/minutes (age 4–5 years old), mild to moderate retraction, nasal flaring, breathlessness during activities, wheezing, stridor within resting. Lastly for those both sign and symptoms severe asthma attack including agitation, lethargy, difficult to open eye, confusion, heart rate more than 200x/minutes (age 0–3 years old) or more than 180x/minutes (age 4–5 years old), a heavy chest retraction, nasal flaring, respiration rate increase from moderate to severe, breathlessness during activity, central cyanosis, wheezing and stridor.

Based on Ducharme et al (2008) the classification of asthma attack level also can be seen from PRAM (Pediatric Respiratory Assessment Measure) score with criteria of valuation which is the oxygen saturation, presence or not suprasternal retraction, presence or not scalene muscle contraction, air entry and wheezing. The assessment score of each criteria are combined with the maximum score of twelve and the minimum score of zero. Based on PRAM Scale Assessment it can be concluded with three categories. Firstly, score obtained 0–3 are categorized as mild attack, 4–7 are

categorized as moderate and 8–12 as severe attack.

Performing pulse oximetry in children with mild attack, it's required for four hours without oxygen administered. While, children with oxygen administered, pulse oximetry is done in each two to four hours. Children with moderate asthma attack, pulse oximetry is carried out every two to four hours continuously especially if the patient signs and symptoms are unstable. Lastly, for severe attack, pulse oximetry is installed continuously to monitor SpO<sub>2</sub> and status of breathing. If it is needed, patient with severe asthma attack required should be transferred into critical care. (Children's Hospital of Colorado; Global Initiative for Asthma for Asthma, 2014; Johnston 2009, Lieberthal 2016, Sighn 2009, Woods 2013; Zentz 2011, in Martin et al 2015)

Pulse oximetry used for SpO<sub>2</sub> examination has been done to children in the stable condition or to reach up SpO<sub>2</sub> 91% or more (Zentz, 2011; Global Initiative for Asthma, 2014; Lieberthal et al, 2006; SIGN 2009 in Martin et al 2015). For children who administered oxygen and have SpO<sub>2</sub> at 91% level, it can be decided to oxygen weaning within monitoring every one times per shift. If SpO<sub>2</sub> more than 91% then oxygen weaning can be performed. For those patients who are wearing nasal cannul oxygen weaning can be reduce half, while for patients with face mask can be cutter down from one to five liter. Finally, SpO<sub>2</sub> examination is performed every 15-60 minutes and followed by every 30 minutes in one hours ahead. If SpO<sub>2</sub> is repeated and resulted at 91% then oxygen remains administered and need to



re-evaluated every 60 minutes. On the other hand, if SpO<sub>2</sub> more than 91% it is better to follow steps of oxygen weaning and if SpO<sub>2</sub> less than 91% it's required oxygen administered until to reach SpO<sub>2</sub> 91% or more. Then followed every 15-60 minutes to reexamine SpO<sub>2</sub>. Oxygen administered can be increased and monitored regularly if SpO<sub>2</sub> less than 91%. And oxygen weaning decision has been made if SpO<sub>2</sub> more than 91%. After oxygen weaning it's require to monitoring patients conditions in every two hours (Martin et al, 2015).

## DISCUSSION

Pulse oximetry is important device at the emergency unit. The device is able to detect hypoxia or oxygenation disturbance as an indicator of oxygenation status toward certain patients. Pulse oximetry can be used as basis of investigation to oxygenation status so then we know when much oxygen needed and when the oxygen should be given. For example, patient that doing activities will require more oxygen then doing resting (Fahy et al, 2011). On the other hand, pulse oximetry at emergency unit is very helpful for diagnose patient as well as an objective evaluation to acute asthma attack and it's complication. Also, this device also can be used to measuring intervention and to showing disease progress (Hassan et al, 2008; Lee et al, 2000).

Performing pulse oximetry promptly can increase monitoring evaluation to patients. Any changes of signs and symptoms can be evaluated as a basis to decision and prevented complication as well. The proper use of pulse oximetry to asthma patients may

advantage both consistency and accuracy of oxygen delivering (Marten et al, 2015).

Several studies revealed that group of treatment using pulse oximetry has less of oxygen consumption compared to other groups. And for those who carry out pulse oxymetry might to detect early. In addition, randomized controls trial had showed that performing pulse oximetry had significantly impacts to decrease complication among post operative patients. Therefore, pulse oximetry as a guidance has been used in operating room and emergency unit (Pedersen, 2005). While, Voepel-Lewis et al (2013) stated that pulse oximetry was able to quickly identify deterioration breathing status and so it can enhance response time to treat the patients as well.

Pulse oximetry also can be used to prevent delay of oxygen weaning. For instances, nurses are still remained administering oxygen even it's SpO<sub>2</sub> has reached 99%, even though it can be initialed oxygen weaning. Therefore, it will be speeding up healing as well as reducing health expenditures. Based on study done by Martin et al (2015) revealed that using pulse oximetry and oxygen weaning decision appropriately could reduce 50% of oxygen consumption and cutted down pulse oximetry utilization by 50–60% as well as reducing length of stay patient at critical care unit. However, pulse oximetry utilization is somehow applied to measure oxygen percentage brought by hemoglobin and it doesn't provide specifics information about blood gas analysis, hemoglobin level, ventilation and amount of blood brings to the tissue as well (Marten et al, 2015; Jo Grap, 2002).

## CONCLUSION

It is convinced that pulse oximetry utilization will provide accurate information related to patients status; reduce over crowding patients at emergency unit; increase patient outcomes and reduce health care cost which those can positively increase service quality in emergency unit.

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# EXERCISE FOR PATIENT WITH TYPE 2 DIABETES MELLITUS: A LITERATURE REVIEW

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## **ABSTRACT**

**Introduction:** Diabetes Mellitus (DM) is a group of metabolic diseases with characteristic hyperglycemia that occurs due to abnormalities in insulin secretion, insulin action or both. Hyperglycemia in the long term can lead to damage to blood vessels which blood vessels become narrowed causing organ damage such as kidney failure, diabetic retinopathy and diabetic foot as a result of blood vessels and nerve lesion, coronary heart disease, to stroke. One of the Diabetes Mellitus management is exercise. Based on the latest research, exercise had significant effect to type 2 Diabetes Mellitus. The aimed of this study was to examine the literature, journal articles and research related to exercise for type 2 Diabetes Mellitus.

**Method:** This was a literature review from database of national and international journals in google scholar, Pubmed, Science Direct and Plos one with research topics restricted from 2010 to 2015 by using keywords. **Result:** There were 11 articles were selected that met the criteria. Most of the aerobic exercise based studies showed a beneficial effect in type 2 DM. Resistance exercise also proved to have positive effect on type 2 DM patients.

**Discussion:** Aerobic exercise is more common in clinical practice compared to resistance exercise in managing T2DM.

**Keyword:** *exercise, physical activity, aerobic, resistance, type 2 diabetes mellitus*

## INTRODUCTION

Diabetes Mellitus (DM) is a group of metabolic diseases with characteristic hyperglycemia that occurs due to abnormalities in insulin secretion, insulin action or both (American Diabetes Association, 2010). In the conditions of hyperglycemia, glucose transport across the cell membrane is reduced and the formation of glycogen from glucose (gluconeogenesis) is reduced but still there is excess glucose in the blood (Long, 1996). Blood glucose levels in diabetic patient is at a level that exceeds the normal limit is  $\geq 126$  mg/dL for fasting blood glucose levels and  $\geq 200$  mg/dl for random blood glucose levels (American Diabetes Association, 2011). Hyperglycemia in the long term can lead to damage to blood vessels which blood vessels become narrowed causing organ damage such as kidney failure, diabetic retinopathy and diabetic foot as a result of blood vessels and nerve lesion, coronary heart disease, to stroke (PERKENI, 2011).

According to data from the WHO in 2000 the number of diabetic patients in the world (over age 20) amounted to 150 million people with an estimated in 2025 would be 300 million people. International Diabetic Federation (IDF) in 2007, estimates that the number of Indonesian population aged 20 years and over suffer from DM as many as 5.6 million people in 2001 and the figure will rise to 8.2 million in 2020. The threat of diabetes continues to haunt people's lives, Approximately 12–20% of the world population is estimated to suffer from this disease and every 10 seconds in the world people have died from complications caused. Complications of diabetes occurs in all organs

in the body are fed small and large blood vessels causes 50% mortality from coronary heart disease and 30% due to kidney failure. In addition to death, DM also cause disability. As many as 30% of patients with DM suffered blindness due to retinopathy complications and 10% had to undergo amputation of the legs.

Management of Diabetes Mellitus consists of five main pillars, namely planning diet, physical exercise, medical treatment, education and monitoring of blood sugar (Smeltzer & Bare, 2008). Results of research conducted by Nadimin (2009) showed that high-fiber diet can lower blood glucose levels when (GDS) as much as 107 mg/dl, from 344 mg/dl to 237 mg/dl and at lowering fasting blood glucose 82.8 mg/dl from the initial fasting glucose 225.7 mg/dl to 142.9 mg/dl. Treatment with pioglitazone also significantly reduced fasting blood glucose levels of 11.7 mg/dl and blood glucose 2 hours post prandial decreased by 30.5 mg/dl (DeFronzo, 2010). Other studies have shown that aerobic exercise can lower mean blood glucose levels 235 mg/dl to 223.14 mg/dl (Indriyani, 2007). Based on the results of research conducted Yoga (2011) that diet, exercise and pharmacologic therapy has an effect in lowering blood glucose levels, therefore, the three are inseparable from each other in the management of diabetes. According Soegondo in Indriyani (2007) physical exercise in patients with DM had a very important role in controlling blood sugar levels, which when doing physical exercise increased glucose utilization by active muscles so that can directly cause a decrease in blood glucose. Physical exercise also can

reduce weight, improve cardiovascular function and respiration, lower Low Density Lipoprotein (LDL) and increase High Density Lipoprotein (HDL) so as to prevent coronary heart disease when physical exercise correctly and regularly. Physical exercise is a powerful stimulus to the entry of glucose into skeletal muscle. So far research on the effects of exercise on blood glucose levels have been conducted, but to date model of isometric exercises that can be used as a method of DM therapy to help regulate blood glucose levels can not be explained.

In patients with diabetes mellitus insulin resistance or insulin deficiency caused by destruction of pancreatic  $\beta$  cells. Insulin deficiency can lead to little or no binding to the receptor so that the process of translocation of glucose transporter (GLUT-4) to the cell membrane becomes blocked. GLUT-4 facilitates the entry of glucose into the cells. When GLUT-4 translocation process will lead to impaired glucose uptake in the blood is impaired, resulting in the accumulation of glucose in the extracellular which will lead to increased blood glucose or also called hyperglycemia (Ganong, 2008). Physical exercise will increase the transport of glucose by stimulating the translocation of GLUT-4 to the surface of muscle cells. At the time of contraction increased energy consumption resulting in decreased Adenosine triphosphate (ATP). ATP will be broken down into cyclic adenosine monophosphate (cAMP) by the enzyme Adenosine Monophosphate Kinase (AMPK), this causes metabolic changes, including glucose transport (Sigal, 2004). Muscle contraction in isometric exercise will result in an increase of calcium ( $\text{Ca}^{2+}$ )

in the cytosol that will activate the enzyme Calmodulin Dependent Protein Kinase (MKNR II). MKNR II and AMPK enzyme will stimulate the translocation of GLUT-4 to the surface of the cell membrane which in turn will bring the glucose into the cells and decreased blood glucose (Rose, 2005).

## METHODS

This was a literature review from database of national and international journals in google scholar, Pubmed, Science Direct and Plos One with research topics restricted from 2010 to 2015 by using keywords "exercise", "physical activity", "aerobic", "resistance", "type 2 diabetes mellitus". There were 11 articles were selected that met the criteria. The criteria inclusion for this literature review are adult with type 2 Diabetes Mellitus and all types of exercise for type 2 Diabetes Mellitus.

## RESULTS

Total of 11 studies were eligible for literature review. Majorities of them were designed RCT and other study designed such as cohort study 1, pre-post design 2, and quasi experimental 1. Majorities of exercise training programs were aerobic exercise, and the others were resistance programs and one of them is endurance exercise.

Most researches which reviewed using the intervention and the control group to know the effect of exercise on T2DM especially the metabolic profile and fitness. Some of them using aerobic exercise as intervention group, and resistance exercise as control group and vice versa. There is a research that makes a combination of both as the intervention group.

Activities in aerobic exercise are: treadmill, elliptical and stationary bicycle exercise cycle. Activity in resistance exercises using a combination of machines and free weights: quadriceps (seated leg press machine and straight leg raises), hamstrings (hamstring curls machine), biceps, triceps, anterior and middle deltoids (using free weights), hip abductors and extensors (gluteal machine). Activities in combination of both did the aerobic exercise and resistance training programs. After a warm-up stage, they worked for 20–30 minutes on a treadmill or bicycle. Qualified exercise physiologist led all exercise sessions. Period of research used in this article varies, ranging from 8 weeks to 1 year. The length of time an average exercise time 20–60 minutes weekly.

All outcome measures were taken by an independent assessor who was blinded to group allocation. Research parameters to know the effect of exercise in T2DM are: metabolic profile (HbA1c, blood glucose, lipid profile: total, high-and low-density cholesterol and triglycerides) and fitness (anthropometric: weight, body mass index, body fat, waist circumference, waist: hip ratio, and cardiovascular: blood pressure, and peak oxygen consumption).

The results showed that the treatment in the form of aerobic exercise, resistance progressive and a combination of both showed significant changes in almost parameters (metabolic profile: HbA1c, blood glucose; lipid profile: total, high-and low-density cholesterol, and triglycerides) and fitness (anthropometric: weight, body mass index,

body fat, waist circumference, waist: hip ratio, and cardiovascular: blood pressure, and peak oxygen consumption). No significant differences between each type of exercises.

There were 6 study using parameters HbA1c and blood glucose level, to know the effect of exercise (aerobic and resistance program) in T2DM. And the result showed that resistance exercise alone reduced HbA1c and blood glucose level was not significantly different when compared to aerobic exercise (the different  $-0.1\%$  and  $-0,1$  mmol/L). Only one study showed aerobic exercise reduce blood glucose level to a greater extent than resistance exercise and both have higher risk of exercise induces hypoglycemia (E. Bacchi, 2012). Three of six study above using blood lipid level as parameter. It showed both of them can reduce blood lipid level and no significant different.

Increase of peak oxygen consumption ( $VO_2$  peak) was greater in the aerobic, but fitness and strength (weight, body mass index, body fat, blood pressure) was greater in the resistance exercise. In the study conducted by Bacchi et al (2012), there were some parameters of insulin sensitivity and  $\beta$ -cell function. In the aerobic and resistance exercise showed increased insulin sensitivity, but  $\beta$ -cell function is no significant changes. In the study conducted by Yavari (2012) combination of two forms of exercise training led to an additional improvement in some of the parameters such as HbA1c and triglycerides compared with aerobic or resistance training alone.

## DISCUSSION

### Effect of aerobic exercise in T2DM

Aerobic exercise comprises of simple training program without using equipment and it showed several positive impact on T2DM (Yokoyama et al., 2004). Aerobic exercise can improves oxygen consumption and increases the functioning of the cardiovascular and respiratory systems. Aerobic exercise is valuable therapeutic strategy for T2DM as it has beneficial effects on physiological parameters and reduces the metabolic risk factors in insulin resistance diabetes mellitus. Several studies have shown the positive effects of aerobic exercise based on different intensities on the improvement of T2DM. Moderate aerobic exercise leads to maintenance of the blood pressure in diabetic neuropathy patients (Mogensen, CE., 2002). However, most of the randomized trial studies showed that high-volume aerobic exercise produced weight loss with significant improvement in insulin sensitivity (Ross R., 2000). As discussed earlier, increase insulin sensitivity normally lasts not more 72 hours, and it can be concluded that regular exercise or physical activity three times/week results in definite and effective management for T2DM patients.

Aerobic exercise improves the physiological parameters, including glycemic control, fasting blood-glucose level and lipid profile. Moreover, it can restore the endothelial function and reduces the arterial stiffness which is the positive denominator for developing cardiovascular complications in T2DM (Yokoyama et al. 2004). Both insulin and exercise increase glucose uptake into skeletal muscle via the glucose transporter (GLUT4)

from an intracellular to the cell-surface. In T2DM, there are deficiencies in the insulin receptors which result in impaired glucose uptake and GLUT4 translocation (Garvey WT., 1998). However, exercise therapy could restore the defects of insulin by providing GLTU4 translocation.

### Effect of resistance exercise in T2DM

Resistance exercise leads to develop proper glucose control and less insulin resistance among T2DM. Resistance exercises are exercises that have to be performed against the resistance. Examples of resistance exercises include the weight lifting. Unlike aerobic exercise, resistance exercises are relied on the equipment. High and moderate intensities of resistance exercise range between 50–75% of 1-repetition maximum (1-RM)) (Boule NG., 2003). A number of studies have documented the potential effects of aerobic training have been beneficial in the therapeutic regimen in T2DM patients. Similar to the aerobic exercise, resistance exercises are useful therapeutic tools in the management of T2DM. In addition, it is also proven to be safe and efficacious for the elderly insulin resistance diabetic patients. Resistance training has been reported to enhance insulin sensitivity, daily energy expenditure and quality of life (Poehlman ET., 2000). Furthermore, resistance training has the potential for increasing muscle strength, lean muscle mass, and bone mineral density, which could enhance functional status and glycemic control and assist in the prevention of sarcopenia and osteoporosis (Hunter, 2004).



### Effect of endurance exercise in T2DM

Endurance exercise involves the use of several large groups of muscles, which depends on the delivery of oxygen to the muscles by the cardiovascular system. Passive exercise needs to include another person or outside force, or produced by voluntary effort of another segment of the patient's own body (Boule NG., 2003). There are paucity of studies on these types of exercise in treating T2DM patients since a wide variety of studies supported the aerobic and resistance training program because of the beneficial effects. Few studies highlighted that endurance-type exercise also reduces postprandial hyperglycemia in T2DM patients. Yet, other uncommon types of exercises are the yoga classes and joba riding. To date, there have been conflicting reports on the yoga classes that have several positive impacts on T2DM. Some studies are successful to report that yoga classes training could improve the glycemic control in diabetic patients (Innes KE., 2007). However, most of the researches could not show the statistical significance over these findings. Similar to that a randomized controlled trial proved that joba riding results in improving insulin sensitivity in T2DM patients (Kubota M., 2007). In future, further studies with significant findings and detailed explanations are warranted to elaborate more on these types of exercise training programs.

### CONCLUSION

In general, aerobic exercise and resistance training alone induce positive effects in the prevention or management of glycaemic control and cardiovascular risk factors. Moreover, these effects may be additive in

the combination of two types of training. Therefore, both aerobic and resistance exercise training should be considered as useful interventions in the management of T2DM to take advantage of different exercise types for glycaemic control, without clear superiority of either of them.

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# THE IMPACT OF EMERGENCY NURSE PRACTITIONER TO THE QUALITY OF CARE

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## ABSTRACT

**Introduction:** The demand of the good quality of care in health service has been increased in the past recent years. The NP work that beyond the traditional scope of medical service believed can emerge the problem in Emergency Department (ED) and increase the quality of care. **Method:** Using an electronic database including Pubmed, Medline Ebsco Host, and Cochrane Library only for English language articles. Combining emergency, emergency department, nurse practitioner, emergency nurse practitioner, quality of care, evaluation, and patient outcomes as the search keywords. The 384 articles retrieved, 224 selected for double articles. Using matching keywords, 12 articles were selected. Finally, 3 articles were selected which are 2 systematic reviews and 1 cohort study. **Result:** The presence of nurse practitioner (NP) in the emergency department can increase the quality of care and the waiting times. Additionally, the NP can also cost-effective and increase the patient satisfaction. **Discussion:** Emergency Nurse Practitioner (ENP) has a new model of service with combine the medical and nursing skill and emphasized the holistic of nursing care including education and health promotion showed a great improvement in health service. The ENP role has been proved to be more effective and efficiency improving quality of care.

**Keywords:** *emergency department, nurse practitioner, quality of care*

## INTRODUCTION

The demand of the good quality of care in health service has been increased in the past recent years. The innovations have been made to meet the population needs by reforming the health service. One of the innovations was the development of the advanced nursing practice to improve the quality of care in health service (Comiskey, Coyne, Lalor, & Begley, 2014). Nurse practitioner (NP) as one of advanced nursing practice has been trusted as a model that offers the improvement in the health service and adapted with the changes of the consumer demands (Jennings, Clifford, Fox, O'Connell, & Gardner, 2015). The NP works are including the activities that before was limited traditionally in the scope of medical practice. These activities were combined with the nursing care, diagnostics, treatment-based and medicine all in one (Jennings, Gardner, & O'Reilly, 2014). This fusion model has changed the traditional nurse role into a new role that needs the responsibility, and accountability that meets with the consumer needs.

Emergency department (ED) is known as one of the most busies and challenging department in the healthcare service. The increasing numbers of patient who visit the ED in each year become another challenge for the healthcare practitioner (Dealey, 2001). The health practitioner has to carry out a good quality of patient care in equal. Moreover, the increasing numbers of patients

will also led ED become overcrowding. The ED overcrowding also effect in the quality of care, including the waiting times, length of stay, and patients' satisfaction (Jennings et al., 2015). The NP role was offered to emerge the problem in ED. It stated that NP role showed a great compliance from the patient for the treatment and the information of patient health status (Dimeo & Postic, 2012). This complex and great role further have an issue about the educational background that NP must have (Chang et al., 1999). Furthermore, the study of the effectiveness of NP role was widely taken (Carter & Chochinov, 2007). The scholar learned about the impact for having the NP role in the ED. However, the update impact of NP role in ED of quality of care and patient outcomes need to be investigated.

## METHOD

Search strategy that use in this article was an electronic database including Pubmed, Medline Ebsco Host, and Cochrane Library only for English language articles. The search term as shown on **Table 1** was combining emergency, emergency department, nurse practitioner, emergency nurse practitioner, quality of care, evaluation, and patient outcomes. The search retrieved 384 articles, which 224 of it selected manually for double articles. Then 12 articles were selected based on the matching keywords. Finally, after read the whole articles, 3 articles were selected which are 2 systematic reviews and 1 cohort study, as shown on **Figure 1**.

Table 1. PIO Strategy

Keywords	
P	Emergency or emergency department
I	Nurse practitioner or emergency nurse practitioner
O	Quality of care or evaluation or patient outcomes or patient care outcomes

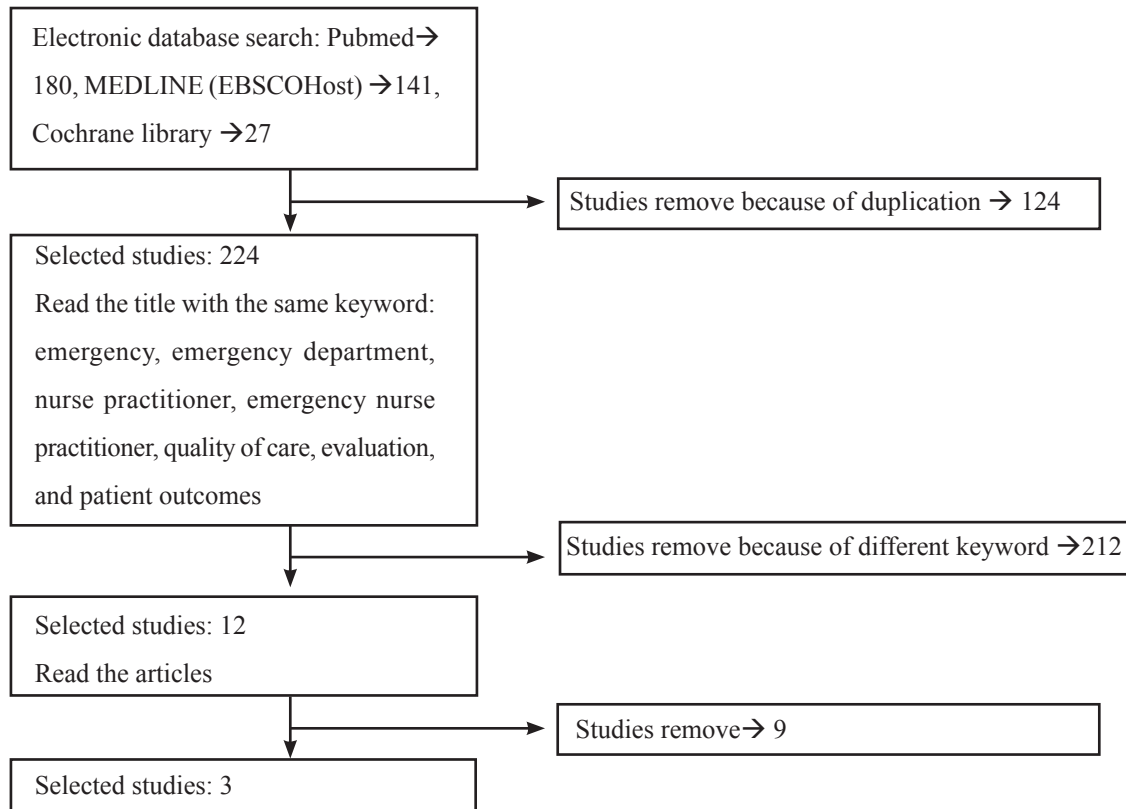


Figure 1. Diagram selecting resources

## RESULT

The result as shown in **Table 2** showed that from three articles that had been reviewed the presence of nurse practitioner (NP) in the emergency department can increase the quality of care and the waiting times (Carter & Chochinov, 2007; Jennings et al., 2015; Jennings, McKeown, O'Reilly, & Gardner, 2013). The fast response and ability of the nurse practitioner could handle the hectic atmosphere in the emergency department. The patient will have less waiting times, and be

able to treat faster. The additional information provide in the article are the presence of NP in the emergency department can also cost-effective and increase the patient satisfaction (Carter & Chochinov, 2007; Jennings et al., 2015; Jennings et al., 2013). As the result of lack of the number of resident in the western, the alternative way to fulfill the health service is by the presence of NP. The NP work can cover up the working load of the resident, so that the resident will be not working over load. The patient satisfaction is also one of

indicator of good quality of health service. Surely, this has to be followed with the other indicators. With the increase of patient satisfaction, the quality of healthcare also can be increase.

Table 2. Synthetizing the Evidence

Outcomes	Carter, 2007	Jennings, 2015	Jennings, 2013
Cost Effective	√ No difference between NP and resident, but no comparison between NP and attending physicians	√ No difference between NP and medical and extended scope of physiotherapist personnel	×
Quality of Care	√ No difference between NP and resident in accuracy of X-ray interpretation Follow up the quality of care using a phone call after discharge from the ED	√ Follow up the health status Decrease unscheduled return rate	√ More health information Re-assess and follow up for patient referral by NP
Patient Satisfaction	√ NP 77%, resident 48%	√ NP higher 1.5 times than total satisfaction	×
Waiting Times	√ Drop from 56 min → 30 min in UK LoS: drop from 99 min → 77 min	√ NP more fast 7 min than medical resident NP 14 min, medical resident: 50 min NP 12 mi, traditional: 31 min	√ NP wait time: 14 min LoS: 131 min

Sources:(Carter & Chochinov, 2007; N. Jennings et al., 2015; N. Jennings et al., 2013)

## DISCUSSION

The findings showed that Emergency Nurse Practitioner (ENP) has a new model of service with combine the medical and nursing skill and emphasized the holistic of nursing care including education and health promotion showed a great improvement in health service (Carter & Chochinov, 2007). The ENP role has been proved to be more effective and efficiency improving quality of care. ENP works are combining both of collaborative ED model of care and managing patient conditions independently (Jennings et al., 2013). Using these findings to emphasized the reduction of resident working hours but still have the result of reduce the waiting time, and length of stay. Not only the waiting time and length of stay, but also the ENP role can improve patient satisfaction (Dealey, 2001). The ENP service can be used in rural area as well as in urban area (Chang et al., 1999). Therefore, the ENP model is proven significantly improve the quality of care in health service.

## LIMITATION AND RECOMMENDATION

This study also has several limitations. The article that came from the western country might have different policy of nursing practice and resources. As Indonesia still developing in using practice this findings may influence and becomes a role model that can be consider for the near future of nursing practice development. The limited numbers of the articles that synthetized also another limitation. For the next systematic review and find the newest evidence based practice, can use more number of article that has been published.

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## RISK FACTOR OF GREEN TOBACCO SICKNESS (GTS) AT THE CHILDREN ON TOBACCO PLANTATION

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### ABSTRACT

**Introduction:** Tobacco farmers are at risk of developing occupational diseases associated with exposure to pesticides and absorption of wet tobacco leaves nicotine through the skin that is called Green Tobacco Sickness (GTS). In 2013, the result of the research showed that 66% of tobacco farmers had GTS symptom. And the continuing research at 2014 showed that 79,2% of tobacco farmer had cotinine degree on the blood was 13,64 mg/ml (more than normal standard) means at GTS symptom. Besides that, the result of observation by researcher showed that there were a lot of children was involved in tobacco plantation in Jember Regency. This research aimed to analyze the risk factor of GTS symptom at children on tobacco plantation, consist of : individual characteristic factors (age, gender, education, connection with the owner of tobacco plantation, period being tobacco farmer) and behaviour factors (knowledge, attitudes, and actions towards GTS), and environmental factors (humidity, rainy, geographic condition, and irrigation). **Method:** This study used an analytical approach with survey method and using cross-sectional design, to analyze the dynamic correlation between risk factors with the effects, with observation approach or collecting the data in point time approach. This study was conducted at 120 tobacco farmer from 2 districts in Jember regency which is a center of tobacco production in September to December 2014. Data was collected by interview with questionnaire and observation to the children that working in tobacco plantation. Data were analyzed by descriptive statistic. **Result :** The results showed that there was 2,5% of children than involved in tobacco plantation. Most of them were male. They aged was 15–18 years old, graduated from elementary, junior and senior high school. The salary was less than one million in a month, and working in tobacco plantation more than 10 years and having smoking habit. They used save protection tools (glooves, long dress, eye protection rarely. A few of them did not higiene personal after working in tobacco plantation. Although they ever got GTS symptom (nausea, dizzy, faint, difficul to breath, sleeping disturbance). **Discussion:** It is needed a socialization in groups of tobacco farmers about the prohibition to involve children in tobacco plantation and the the prevention of GTS symptoms in children through behavioral approach by means of a shower and change clothes after working in the tobacco plantation, and the use of waterproof clothing, gloves and boots.

**Keywords:** *risk factors, green tobacco sickness, children, tobacco plantation*

# THE EFFECTIVENESS OF PROGRESIVE MUSCLE RELAXATION (PMR) TO REDUCE PAIN

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## ABSTRACT

**Introduction:** Pain is common problem in many person with acute and chronic diseases. Specifically pain control is common obstacle limiting physiotherapy treatment. The progressive muscle relaxation (PMR) is a technique that involves the sequential tensing and relaxation of major skeletal muscle groups with the aim of inducing relaxation. The purpose of this study was to determine evidence for the effectiveness of PMR for decreasing the pain both acute and chronic pain. **Methods:** This was literature review study from journal database PubMed, Proquest, EBSCO restricted from 2004 until 2013. **Result:** There was 10 article included by searching through the appropriate keyword topic, after read the abstract only 4 journals will be included in this paper. **Discussion:** The conclusion from this study were reviewed that most of the research indicate reduction in perceive levels of pain with Progressive Muscle relaxation intervention, including in combined Progressive Muscle relaxation. This intervention can be recomended for nursing to decrease the pain.

**Keywords:** *progressive muscle relaxation, pain*

## INTRODUCTION

Chronic illnesses are increasing in recent days. The main problems of chronic illness are pain. Pain sensation is the experience of pain as reported by patient, whereas pain behavior is the set of observable behaviors that indicate a patient is experiencing pain. Many scholars have shown interest in reduce pain and pain management. One of complementary treatment in pain management that involved psychologically of patient is Progressive Muscle Relaxation (PMR).

Progressive Muscle Relaxation (PMR) is a technique that involves the sequential tensing and relaxation of major skeletal muscle groups with the aim of inducing relaxation. In Progressive Muscle Relaxation (PMR), patients start to deliberately contract muscles and hold the tension; secondly they release all tension and focus on the sensation of relaxation. Regular practice will then help patients to recognize tension and to voluntarily relax affected muscles.

Therefore, study to investigated Progressive Muscle Relaxation (PMR) as complementary treatment in pain management is needed. This paper was examining critically the effectiveness of Progressive Muscle Relaxation (PMR) in reducing pain.

## METHODS

Systematic searches were undertaken using EBSCO database, ProQuest, and PubMed. It restricted from 2004 to 2013. Through the appropriate keyword topic and found 10 journals, after read the abstract only 4 journals will be included in this paper.

## RESULTS

Based on the articles above Progressive Muscle Relaxation (PMR) were effective in reducing pain as complementary treatment. Many other complementary treatment were provided to reduce pain. This study were reviewed that most of the research indicate reduction in perceive levels of pain with Progressive Muscle Relaxation (PMR) intervention, including in combined Progressive Muscle Relaxation (PMR). This intervention can be recommended for nursing to decrease the pain. Progressive Muscle Relaxation (PMR) is the easiest treatment that can be done by family members and patient itself.

This treatment is the cheapest among others. No need to pay higher to do this treatment. Yet the only way to do these treatments only focus on using muscle exercise.

## DISCUSSION

The Progressive Muscle Relaxation (PMR) is treatment that can be used to reduce pain. This intervention can be recommended for nursing to decrease the pain and it's easiest to use for everyone. The future researches are needed to study the effectiveness combining the PMR with another complementary treatment.

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Table 1. Literature Review

No.	Name, Year	Intervention	Control	Sample (n)	Method	Random	Parameter	Result
1.	Tejas et al., 2013	PMR (progressive muscle relaxation with visual imagery for 30 min, daily for 1 week.	Yes	10 subject with burn were randomly assigned to two groups	Randomized control trial	Yes	visual analogue scale, hospital anxiety and depression scale (HADS)	There an pre-treatment VAS score for subjects in group B was 5.9 which reduced to 4.5 post treatment. The paired t-test which was statistically significant (P-value: 0.0007). The unpaired t-test of which was statistically significant (p-value:0.0022) for anxiety and depression scores. Theme an pre- treatment anxiety level in subjects in group B was 12.6 i.e. abnormal which reduced to 8.8 i.e. borderline abnormal post treatment where as the mean pre- treatment depression score was 12.8 i.e. abnormal which reduced to 9.6 i.e. borderline abnormal.

No.	Name, Year	Intervention	Control	Sample (n)	Method	Random	Parameter	Result
2.	Engel, Jensen and Schwartz, 2004	PMR (progressive muscle relaxation in 7 session, each session is about 1 hours.	No	3 partisipan with various cerebral palsy pain	Longitudinal studies	No	EMG (electromyographic)	Two of 3 participants reported decreases in their pain experiences post treatment. Baseline, during-treatment, and post treatment mean typical daily pain intensity recordings were derived from participants' pain diaries. Participant 2 and Participant 3 reported a 51% and 15% decrease in pain intensity baseline to post treatment, respectively. Participant 1 reported no change in mean pain intensity (reported 10/10) across all experimental phases.

No.	Name, Year	Intervention	Control	Sample (n)	Method	Random	Parameter	Result
3.	Lauche <i>et al</i> , 2013	Compared between PMR (progressive muscle relaxation) and Cupping and Massage	No	31 patient Allocated to PMR, 30 Patient Allocated to Cupping and Massage	Randomized controlled clinical trial with two parallel groups	Yes	Primary outcome measure was the current neck pain intensity(0–100mm visual analog scale;VAS). Secondary outcome measures included pain on motion, affective pain perception, functional disability, psychological distress, wellbeing, health-related quality of life, pressure pain thresholds and adverse events.	Both groups showed significantly less pain compared to baseline however without significant group differences. The mean baseline VAS score for subjects in PMR group was which 56.36 reduced to 45.26 post treatment. The mean baseline VAS score for subjects in cupping massage group was which 55.86 reduced to 39.86 post treatment. The statistic result (p-value: 0.98) showed that no significantly differences between two treatment



No.	Name, Year	Intervention	Control	Sample (n)	Method	Random	Parameter	Result
4.	Jensen et al, 2009	Pre treatment assessed 7 days before treatment for both PMR and HYP Patients received treatment for both PMR and HYP for 10 sessions each. Post treatment assessed 7 days (Cont...)	No	8 respondents with Hypnosis, 14 respondents randomly assigned to both HYP and PMR:7 responden with Hypnosis and 7 responden with PMR.	Quasy experimental	No	BPI pain interverence scale. Treatment outcome expectancy	BPI pain interverence scale: Hypnosis : 1) Decrease of pain intensity from pre treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) increase of pain intensity from post-treatment to 3 month follow up PMR :1) increase of pain intensity from pre-treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) decrease of pain intensity from post-treatment to 3 month follow up

No.	Name, Year	Intervention	Control	Sample (n)	Method	Random	Parameter	Result	Parameter
4.	Jensen <i>et al</i> , 2009	after the last treatment for both PMR and HYP. The 3 months follow up, patients were assessed for pain intensity and pain interference in week 1 period after 3 months from the last treatment.	No	8 respondents with Hypnosis, 14 respondents randomly assigned to both HYP and PMR :7 responden with Hypnosis and 7 responden with PMR.	Quasy experimental	No	BPI pain interverence scale. Treatment outcome expectancy	Treatment outcome expectancy: Hypnosis : 1) Decrease of pain intensity from pre treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) increase of pain intensity from post-treatment to 3 month follow up PMR :1) increase of pain intensity from pre-treatment to post-treatment. 2) Decrease of pain intensity from pre treatment to 3 month follow up. 3) decrease of pain intensity from post-treatment to 3 month follow up	

# THE CHALLENGE OF REFRACTORY SUFFERING IN PALLIATIVE CARE

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## ABSTRACT

**Introduction:** In palliative care, witnessing unrelieved suffering takes its toll on all concerned irrespective of a clinician's years of service. However, the effect of witnessing such suffering on these experienced clinicians has largely been overlooked. The aim of this study was to examine healthcare professionals' (nurses, doctors, and allied health workers) experiences of working with patients' unrelieved suffering, together with their clinical management strategies. **Method:** A qualitative research design involving semi-structured interviews was used to collect the data. After ethical approval, seventeen experienced palliative care clinicians participated. **Results:** The overarching theme of negotiating uncertain terrain was common across all clinician stories. In order for them to work successfully with a patient's persistent suffering, clinicians had to negotiate areas of practice characterised by uncertainty, with no clear directions and with few expert guides. In reviewing their experiences, they identified within an overarching theme of negotiating uncertain terrain four subthemes: Changing Approach from "Fixing" to "Being With," Maintaining Perspective, Negotiating, and Maintaining Boundaries, and Living the Paradoxes. The oral presentation will outline the latter subtheme only, "Living the Paradoxes". **Discuss:** This study highlights that dealing with patients' refractory suffering involves clinicians moving into unfamiliar territory. For them to work effectively in this terrain clinicians need wisdom, courage, and a commitment to not abandoning the suffering person.

**Keywords:** *Palliative Care, Suffering, Clinicians' Experiences*

# THE EFFECT OF BOILED THE RAMBUTAN FRUIT PEELS ON BLOOD GLUCOSE LEVEL REGULATION IN MICE WITH DIABETES MELLITUS

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## ABSTRACT

**Introduction:** Diabetes mellitus is a metabolic disorder caused by abnormality of insulin secretion and insulin action which leads to increase of blood glucose level. Naphelium lappaceum Linn peel is predicted to be able to reduce blood glucose level by its contain of tanin, fenol, and flavonoid. Tanin translocate GLUT 4 cell membrane and transport glucose to the cell. Flavonoid and fenol take roles to increase insuline secretion and glucose up take. **Methods:** This study was used the boiled of Naphelium lappaceum Linn fruit peels as intervention given to male mice of Swiss Webster line. Design used in this study was experimental research design with pre and posttest control group design. Total sampels were 28 mices which divided into four groups: (1) non- intervention positive control group, (2) group with 53,3% concentration of Naphelium Lappaceum Linn, (3) group with 26,6% concentration, (4) group with 13,3% concentration. Data were analyzed using One Way Anova. **Result:** Result showed that group with 53,3% concentration of Naphelium Lappaceum Linn decreased more on group with fasting blood glucose level ( $\pm 80,14$  mg/dl). There was significant difference of random blood glucose levels between the control group and the group with 53,3% and 26,6% concentration ( $p = 0,029$  and  $p = 0,030$ ). **Discussion:** It can be concluded that the boiled of Naphelium Lappaceum Linn fruit peel (in 53,3%, dose 0,5 ml/grbw) was able to regulate the fasting blood glucose level and inhibit absorption of glucose in the digestive systems of mice with diabetes mellitus.

**Keywords:** Diabetes mellitus, blood glucose level, Naphelium Lappaceum Linn

# CORRELATION BETWEEN SPIRITUAL SUPPORT AND FAMILY RESILIENCY IN PATIENT ON HEMODIALYSIS

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## ABSTRACT

**Introduction:** The families of patients on hemodialysis mostly faces family stressor. Families use various coping mechanisms to deal with it. Spiritual support used by families in dealing with family crisis when another support does not available. The purpose of this research was to find the correlation between spiritual support and family resiliency in patient on HD. **Method:** A Cross-sectional design used to elicit description of spiritual support and family resilience from 30 patient caregivers. The respondents was selected according to the inclusion criteria. The independent variable was spiritual support which was measured by structured questionnaire. The dependent variable was family resilience which was measured by Family Resilience Assessment Scale (FRAS). The data were analyzed by using Spearman Rank with significance level of  $p \leq 0.05$ . **Result:** The results showed that spiritual support has positive correlation with family resiliency ( $p=0.00$ ;  $r=0.60$ ). **Dicussion:** Thus mean, the higher spiritual support can evokes family resilience. It can be concluded that families which have higher spiritual support can maintain family cohesively during family crisis and achieved family development stage. Another suggestion for future research would be to reviewing point-of-view from other family members even though patient its self.

**Keywords:** *spiritual support, family resiliency, family crisis, hemodialysis*

## INTRODUCTION

Patients with Chronic Renal Failure (CRF) who had hemodialysis therapy (HD) and his family are faced with various stressors. Ranging from changes in the structure of the role of the family, the tension in the family, discord and even separation of family members, despair, and financial problems. The family will respond to stressors in a way to make adjustments within the family which called adaptation. The adaptation process carried out by families affected by the magnitude of stressors and problem solving (coping) family. When the stressor quite hard while the family coping is inadequate then the family will fail and make maladaptive adaptation. Maladaptive adaptation is only overcome or reduce stressors in the interim period. Maladaptive adaptation will also lead to greater stressors in the future so the family moved into a family crisis situations (Friedman, 2002).

Results of preliminary studies in September 2014 at the clinic Haemodialysis (HD) RS Margono Soekarjo showed that 7 out of 10 families of patients HD experienced moderate stress levels, while others indicated to have high stress levels. The entire family of the patient was experiencing difficulties in managing family members who undergo regular HD. Families who had high stress even said that they lack the spiritual support either from religious leaders and health professionals. The patient's families only received support from religious communities or neighbors both in hospital and at home. Family requires an ability to respond in a healthy and productive way when facing obstacles or trauma. Not only minimize stress,

but also face the stressors adaptively so that it will not reappear in the long term. According to Black & Lobo (2008), family resilience is a successful coping of family members when having trouble, enabling the entire family to evolved in the warmth, support, and cohesion. Family coping behaviors defined in this theoretical model as the use of a variety of efforts and resources in families in managing stressors. Resources here is what is owned by the family, while coping is what is done by the family.

Spirituality is an important factor of resilience. Spirituality makes the family was able to unite, understand, and cope with stressful situations. White et al. (2004) found that patients and families with kidney disease states spirituality in a different perception. Although most people think to look for and rely on social support as a coping responses, but some studies have reported that the spiritual support (spiritual support) is an important source of coping. According to Walsh (2006), spiritual beliefs and religious of individuals and families are the core of all families coping and adaptation. Research conducted by ROF et al. (2009) identified that the main source of spiritual support are: the lord, membership of a religious community, others family members, friends, and healthcare providers. Based on situation above, this study was aimed to identified the correlation of spiritual support and family resiliency of patients on hemodialysis.

## METHOD

This research was a descriptive correlation with cross-sectional design that was conducted in Desember 2014 at the clinic

Haemodialysis (HD) RS Margono Soekarjo, Purwokerto, Indonesia. The number of samples in this study were 30 families by consecutive sampling technique according to the the inclusion criteria. The criteria for inclusion in this study were: a family who accompanied patients undergoing HD (considering that the patient already undergoing HD for 6 months or more); the families staying at home with the patient and the primary caregiver.

Variable family spiritual support was measured using an instrument developed by the researchers based on the theory. This instrument consists of 3 components: (1) Rituals support and faith, (2) Emotional support, (3) Meaning of life. Meanwhile variable family resilience was measured using a questionnaire Assessment Family Resiliency Scale (FRAS). Data were analyzed using Spearman Rank test with  $\alpha = 0.05$ .

## RESULT

Level of families spiritual support in this study were divided into three levels; low, moderate and high. Based on Table 1, it can be seen that most families of patients on HD (66.7%) have a spiritual support at moderate levels. On the other hand, only 13.3% of families who have high spiritual support, and 20% still have a low spiritual support.

Family resilience levels categorized into two levels, are adequate and inadequate. Based on the table it can be showed that almost half of the respondents (43.3%) have an inadequate resilience. In addition, it was seen that 20 respondents have moderate spiritual support, but 7 of them still had an inadequate family resiliency. Then statistical

analysis showed p value  $<0.05$  which means there was a significant and positive correlation between spiritual support to the resilience of families which in moderate strength ( $r = 0.60$ ).

Table 1. Cross Tabulation of Spiritual Support and Family Resiliency

Spiritual Support	Family Resilience			
	Adequate		Inadequate	
	n	%	n	%
Low	0	0	6	20.0
Moderate	13	43.3	7	23.3
High	4	13.4	0	0
Total	17	60	13	43.3
Spearman Rank test	p= 0.00		r = 0.60	

## DISCUSSION

The research data showed that 13 families have inadequate resilience. This is due to the duration of the crisis situation that was experienced by families in which respondents are the families of patients who have undergone therapy for 6 months or more. Simon, Murphy and Smith (2005) states that families who are experiencing difficult situations in a short time requires only minor changes within the family, but once families experiencing difficult situations in a long time will require adaptation to the situation. This means that in the initial phase of adaptation families will experience a major stressor. In addition, the families had experienced the situation for 6 months or more, thus mean they had entered an adaptation phase of a crisis situation.

Changes made to the family include changes in the family system as a shift in the role of breadwinner who originally was father or husband changed to wife or son, and conversely, if a mother or wife is ill, then the household task is delegated to the husband. Delegation of tasks within the family makes one member of the family has a big responsibility and a dual role, such conditions could ultimately affect the resilience of the family.

Based on the research findings, there were 13 families had inadequate resiliences. This is caused by the low score on the family belief system components, especially in sub-component positive outlook and transcendence. Walsh (2006) states that a positive view of the family when facing a problem or a crisis situation is important. The low positive outlook family makes the family does not have an initiative and persistent efforts in dealing with difficult situations or a family crisis. Such conditions cause the family becomes difficult to control and accept the situation so that they experience prolonged crisis.

Lack of spiritual support can lead to inadequate family resilience. Based on data, 2 out of 7 respondents who had moderate spiritual support were had an inadequate family resilience. This is due to they had a non-nuclear family structure. Coyle (2005) suggested that the family structure proved to be able to influence the resilience of the family. The statement was supported by Ganong in Shabhati (2012) that the structure of the nuclear family (consisting

of two parents and children) provide a good environment for family members.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

A small percentage of family had a low spiritual support, especially on the dimensions of emotional support. Meanwhile, almost half of the families had inadequate resilience. This condition was due to lack of interaction with the religious community or group support and the lack of organizational patterns, especially in the sub-components of social and economic resources and family type. In addition, spiritual support showed a significant and positive correlation with the family resilience, which means that the higher family's spiritual support it will establish adequate family resilience.

### **Recommendation**

Nurses should not only focus on the patient but also on the patient's family so that they can provide spiritual support for patients and families. Even nurses can help provide The priest/religious leaders if necessary. In addition, it is needed for a policies related to providing a place for the family communities of patient HD (support group) at the clinic HD so that they can interact each other and exchange information which can lead to a positive benefits. Further, the future study is expected to be using a combination of quantitative and qualitative approaches to help better in understanding the dynamics of family resilience and spiritual support.



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# THE EFFECT OF NONI FRUIT JUICE (*MORINDA CITRIFOLIA*) IN DECREASING MENSTRUAL PAIN (DYSMENORRHEA)-PHASE II EXPERIMENT

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## ABSTRACT

**Introduction:** Dysmenorrhea is menstrual pain in such circumstances where great, forcing the patient to rest and leave the work or its way of life everyday, for several hours or several days (Simanjuntak, 2007). In Indonesia, menstrual cramps affect approximately 55% of menstruating women of childbearing age and 10% of them had severe symptoms that require bed rest. Noni (*Morinda citrifolia L*) is a fruit containing complete nutrition. Noni functioning as an analgesic has been known in the history of traditional medicine, so that's what makes this plant is called "pain killer tree" or "headache tree". The purpose of this research was to find out the effect of Noni juice (*Morinda citrifolia L.*) on the reduction of menstrual cramps. **Methods:** The research employed Pre Experiment One-Group pre-post test design. The population of this study was teenage students in the Department of Nursing, Health Polytechnic of Malang, Ministry of Health of Indonesia, and in STIKES Kendedes who experienced menstrual cramps (dysmenorrhea). To ensure that the samples represented the population, the techniques of consecutive sampling and random sampling were employed to select those who experienced menstrual cramps between the months of July and November 2014. The sample size was 25 teenage students. Noni juice was made from selected noni fruits that were unripe, fresh, green, and hard and processed in the laboratory. The instrument used to assess the level of cramping pains (dysmenorrhea) was questionnaires using Descriptive Verbal Scale (VDS), which consisted of 6 levels of pain. **Results:** The results showed that before the treatment, the level of cramping pain of 17 respondents was moderate (68%, N = 25) and that of 7 respondents was severe (28%, N = 25). After the treatment, 18 respondents (72%, N = 25) did not experience cramping pain at all and 6 respondents (24%, N = 25) experienced mild pain. The statistical analysis using Wilcoxon test indicated that there was significant difference in the average rates of cramping pains before and after the treatment ( $p = 0.000$ ). **Conclusion:** This suggested that noni juice could significantly reduce the cramping pains of menstruating teenage girls.

**Keywords:** *noni juice, menstrual pain response, teenage girls*

## INTRODUCTION

Noni (*Morinda citrifolia* L.) fruit is a nutritionally complete food. Nutrients that the body needs—among others are carbohydrates, protein, vitamins, and essential minerals—are also available in noni fruit and leaves. Most of the indigenous Polynesian cultures of the past and present, have been using noni as their staple food. Native of South Pacific islands consume noni fruit to survive in a time of famine. (Magdalena, 2011).

Noni fruit ability as an analgesic has been known in the history of traditional medicine, so that the plant is called as “pain killer tree” or “headache tree”. Scientific research has proven the beneficial effects of Noni to overcome the pain. In 1990, researchers found a significant relationship between the dose of extract of Noni juice with analgesic activity on guinea pigs. Generally, the more widely used, the analgesic effect will be stronger (Magdalena, 2011).

Studies and research on Noni continues to be done by various research institutions and universities. Dr. Ralph Heinicke (1972), a famous biochemist from the United States found out that the Noni fruit contains xeronine and its precursor (proxeronine) in large numbers. Proxeronine is a type of colloid acid that does not contain sugar, amino acids or nucleic acids such as other colloids with a relatively large molecular weight, more than 16.000. By taking proxeronine, the xeronine levels in the body will increase. In the human body, proxeronase enzymes and other substances will turn proxeronine into xeronine. Xeronine is one of the important substances that regulate specific functions of proteins and cells of the human body.

Normally, proxeronine is stored in the liver and are periodically released into the bloodstream to be absorbed by the organ as needed. Human tissue cells contain receptors, a binding with xeronine. In the process of pain, xeronine changing receptor proteins in the brain to be activated to bind endorphins. Endorphin is an endogenous opioid polypeptide that functions as a neurotransmitter, is produced by the pituitary gland and the hypothalamus as an anti-pain.

In 1993, University of Hawaii researchers managed to separate substances of Noni scopoletin. These substances have medicinal properties, and experts believe that scopoletin is one of the substances contained in Noni fruit that can bind serotonin, one of the important chemical substances in the human body. Scopoletin serves to widen the blood vessels that are narrowed in blood circulation. Scopoletin compound (hydroxy-methoxy-coumarin) is very effective as an anti-inflammatory.

Many theories describe the mechanism of Noni to relieve pain. One is the theory of Dr. Ralph Heinicke (famous biochemist from the US) which says that the xeronine plays a role in relieving pain. This is associated with the ability of xeronine to normalize protein in abnormal cells, including cells of brain tissue, the source of the pain. Some cases of chronic pain such as constant headaches, nerve pain in muscles, and joint pain are cured after taking Noni juice. Dr. Joseph Betz, a chemical researchers from the FDA (Food and Drug Association) division of the Natural Products Center For Good Safety and Applied Nutrition at the US said that some

experiments have shown that Noni juice can soothe muscle movement (Maria, 2007).

Pain or tenderness can occur in a variety of conditions, such as pain arising during menstruation (dysmenorrhea) and joint pain at the time of menopause. Dysmenorrhea is menstrual pain in such circumstances where great, forcing the patient to rest and leave the work or its way of life everyday, for several hours or several days (Simanjuntak, 2007). The incidence of menstrual pain in Indonesia is estimated to reach nearly 55% of women of childbearing age. They are tormented by pain during menstruation and 10% had severe symptoms that require bed rest. The incidence of primary dysmenorrhea types in Indonesia is around 54.89%, while the rest were patients with secondary type (Qittun, 2008).

Dysmenorrhea, or menstrual pain occurs because of an imbalance of the progesterone hormone in the blood resulting in pain to arise, but the symptoms certainly can be associated with ovulation. During the luteal phase, there is too much release of prostaglandin F<sub>2</sub>α (PGF<sub>2</sub>α) that can increase uterine contractions and causes the uterus arteriolar vasospasm, resulting in ischemia and lower abdominal cramps (Bobak, 2004). The increasing production of prostaglandin F<sub>2</sub>α (PGF<sub>2</sub>α) and prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) or inadequate ratio of PGF<sub>2</sub>α: PGE<sub>2</sub> can increase tonus uterus rest, myometrium contractile pressure, the frequency of uterine pressure, and arrhythmic contraction of the uterus. These abnormalities will cause vasoconstriction, ischemia and hypoxia uterus, all of them causes pain. In general,

50–60% of women require analgesics drugs to handle dysmenorrhea (Riyanto, 2002).

There are many ways to eliminate or reduce pain, pharmacologically by using analgesic drugs or non-pharmacological ways to eliminate the pain (Long, 1996). The usual treatment for reducing pain during menstruation is a non-steroidal anti-inflammatory drugs (e.g. ibuprofen, naproxen and mefenamic acid). Most drugs are anti-inflammatory non-steroidal (NSAID), effective in treating primary dysmenorrhea in 70–90% of cases, but has side effects that can impact negatively. There have been not much research on the use of non-pharmacological methods that shows high effectiveness in reducing menstrual pain (Stephenlie, 2004). The use of herbs for the treatment has been done, including to noni fruit that is believed to have many health benefits. Some cases of chronic pain such as continuous headache, muscle pain and joint pain are healed after consuming Noni juice. Empirically, noni fruit also has properties to cope with pain during menstruation, but it has never been scientifically proven.

Noni fruit does not give toxic effects in experimental done to animals and humans. This is evidenced by some of the results below. Bret J. West et al., in 2009 continued to do research on subchronic hepatotoxicity and toxicity tests of noni fruit. The results show that the guinea pigs given noni fruit in the form of freeze-dried-strain did not show any decrease in its HepG2 cell survival, it did not affect the accumulation of neutral lipids and phospholipids which is an indicator of hepatic cell necrosis, and no histopathological

changes in liver cells. In this study the dose of noni juice was more than 6.86 g/kg which is equivalent to about 90 ml/kg of noni juice.

In the first phase of the research on the effect of noni fruit juice to pain and toxic effects that were performed on 36 guinea pigs (*Rattus norvegicus*), the result shows that unripe noni fruit juice contains xeronine 1339.254 ppm, more than the ripe noni fruit juice, which is 893.960 ppm, and it is proven to reduce the pain response of guinea pigs at the scale of more than 60% for the ripe noni fruit (dose of 2 ml, 4 ml, 6 ml per 100 grBW) and over 75% for unripe noni fruit (dose of 4 ml/100 grBW). This indicates that noni fruit juice especially the unripe ones highly effective in reducing pain in guinea pigs. This study also found out that the administration of noni fruit juice did not leave toxic effects in guinea pigs that none of the guinea pigs died after being given noni fruit juice, even at maximum doses (Astutik, 2012). Research on the toxicity of noni fruit juice has also been performed clinically in 96 respondents aged 18–64 years old and showed that the administration of Tahitian noni fruit juice up to a dose of 750 ml/day is safe or harmless (Davies & Mugglestone, 2003).

Based on the above background, the researchers is interested in conducting research on the effect of noni fruit juice to a decrease pain in menstruation (dysmenorrhea), in the hope that the results of this study can be used as information material and development of science related to the utilization of medicinal plants/herbs as an alternative to overcome menstrual problems.

The research problem is: "Is the administration of Noni fruit juice (*Morinda citrifolia* L.) can reduce menstrual pain?" The general objective of this research is: Knowing the Effect of Noni Fruit Juice (*Morinda citrifolia*) to decrease menstrual pain, while the specific objectives of the research are: (1) to identify menstrual pain before given noni fruit juice, (2) to identify menstrual pain after given the noni fruit juice and (3) to analyze the effect of noni fruit juice to decrease menstrual pain. The benefits of the research are: (1) As a reference material or literature development for Educational Institutions about the benefits of medicinal plants/herbs for health, especially in dealing with menstrual pain, (2) To provide information to people that Noni juice can be used as an alternative to overcome menstrual pain and (3) For information or input material for further research.

## METHODS

The design of this research is a Pre Experiment with *One-Group Pre-post test Design* (Nursalam, 2011). In this study, a pretest was conducted to respondents about the level of dysmenorrhea before given Noni juice (O1) and then given treatment by providing Noni juice 3 times daily for 2 days, then a second measurement (posttest) was carried out on the level Dysmenorrhea on the respondents (O1<sup>1</sup>).

The population in this study were all teenage girls who experience painful menstruation (dysmenorrhea) at Health polytechnic of Malang in Nursing Department and STIKES Kendedes. The research

sample (because not all the population menstruate at the time of the study) was chosen according to the characteristics of the population (Notoatmodjo, 2010). The sample in this study mostly were teenage girls in Health Polytechnic of Malang in Nursing Department and STIKES Kenedes who experience menstrual pain and meet the criteria of the sample during the months of July to November 2014. The sample size were 25 people.

Sampling technique in this research is was a consecutive sampling and random sampling method was used to select teenage girls who meet the criteria for the sample. Criteria for the sample in this study were criteria for inclusion, exclusion and resignation. Inclusion criteria for the study were: (1) Girls who experience primary dysmenorrhea at the first day of menstruation and during menstruation, (2) Not currently taking medication to reduce dysmenorrhea, (3) Does not have any disease (infection of the uterus, uterine tumors, etc.) or in good health, (4) Does not have any allergy to noni, (5) Volunteers and no correlation between respondents with researchers and (6) Willing to be a respondent. Exclusion criteria for the study were: (1) Taking drugs or other drinks to reduce pain other than noni juice during the study, and (2) Experiencing very great menstrual pain. While the resignation criteria are: (1) Respondents who do not want to continue the study because of its side effects or discomfort (nausea/vomiting, allergies) and (2) Respondents do not feel the benefits of drinking noni juice and still no decrease in pain.

The study was conducted at Health Polytechnic of Malang and STIKES Kenedes Malang. The research was conducted from July to November 2014, while the data collection was from September to November 2014.

The independent variable of the research was noni fruit juice administration with operational definition of Noni juice administration to teenage girls who are menstruating and experience menstrual pain (Dismenorhea) with a dosage of 9 ml/kg bw per day, which is taken 3 times daily for 2 consecutive days. Meanwhile, the dependent variable is the decline of Dysmenorrhea with operational definition of pain changes in teenage girls at Health Polytechnic of Malang and STIKES Kenedes Malang who are experiencing dysmenorrhea measured by using twice Verbal Descriptive Scale (VDS) on day 1 and day 2 of menstruation. Measuring tool was using a VDS questionnaire with pain category of no pain to severe pain pain, and the score is 0 to 5.

The material for the research is fresh unripe Noni fruit with fruit condition criteria of green and hard, which is made in the form of fruit juice with the addition of honey sweeteners much as 7–8%, with laboratory processing. The materials were taken by the researchers themselves from the tree and the fruit were selected. Compensation will be given to the owner of the tree.

The research instrument used to assess the level of pain (dysmenorrhea) is a questionnaire using Verbal Descriptive Scale (VDS), which consists of 6 levels of pain.

The procedure of the research consisted of two phases. The first stage was the making of the product of noni fruit juice in the laboratory and analyzing xeronine substances or nutrients in the product by way of: (1) Noni fruit is processed in the laboratory in the form of juice (direction of making it is attached), (2) put the juice in a cup/bottle of 150 ml, (3) Do the xeronine substances and nutrients analysis on the product (4) label the product. Meanwhile, the second phase of the research was the provision of noni fruit juice products to the respondents.

Data collecting in this research was done through questionnaires, guided interviews, and observation. The steps were: (1) Making a research permit, (2) Dividing the questionnaire for the preliminary study to find out how many people experiencing dysmenorrhea, to know what they do to handle it and the severity of their pain/dysmenorrhea, (3) Conducting guided interviews to know the type of dysmenorrhea as well as their menstrual cycle, (4) Determining respondents based on inclusion criteria that have been created are then choosing potential respondents randomly, (5) Visiting respondents a few days prior to the date of menstruation to ensure that the plan will be undertaken, (6) Describing the action to be performed, (7) Measuring the weight of respondents, (8) Preparing the tools and materials necessary for action, (9) Requesting approval for becoming respondents, and (10) Measuring the level of dysmenorrhea before the action is taken.

Meanwhile, the steps for collecting data after performing the action were: (1) Measuring the level of dysmenorrhea pain

of respondents after administration of Noni juice for 2 days with a dose of 9 ml/ KgBW. Taken three times a day by using a verbal descriptive scale (VDS), (2) Measuring the level of pain which was done twice a day, on the first day and the second day of treatment conducted by two observers, and (2) During the treatment, if there is no decline in the pain, then a standard therapy will be done. During the study, the researchers conducted the recording of data on hours/time of drinking noni juice, dose, pain response, and adverse effects on the sheet when there is a data collection/observation sheet. Recording a response to pain is done twice after drinking noni juice after the first dose and the second dose on day two to determine immediately whether there is a change against menstrual pain.

Data processing is done with editing, coding, scoring and tabulating, and then the data is processed and analyzed using statistical test Wilcoxon Match Pairs Test (Sugiyono, 2010). This research will be done using error level of 0.05. If  $z\text{-count}$  is smaller than  $z\text{-table}$  then  $H_0$  is accepted and  $H_a$  is rejected.

The data is presented in the form of a frequency distribution table and the results of its analysis. Both data—the primary data table and the results of the statistical calculations—have been analyzed, presented and described in tables, they include: (1) The age distribution of clients, (2) The weight loss distribution, (3) The percentage of menstrual pain before action, (4) The percentage of menstrual pain after the action, and (5) The analysis of dysmenorrhea before and after the action. This research was conducted with respect



to research ethics, they are: (1) Informed consent (studies approval); (2) The name of the research subjects are not included (anonymity) on measuring devices sheets and researchers only write code in data collection sheets or the results of the research that will be presented; (3) The confidentiality of all the information that has been collected is guaranteed; (4) The experiment was conducted without causing distress to the subject, especially if it is using a special action; and (5) Subject has the right to decide if they are willing to be the subject or not, in the absence of any sanctions (Right to self-determination).

## RESULT

Based on the analysis method of Chromatography High Performance Liquid Chromatography (HPLC) to identify the active

substance content of noni fruit juice which was conducted in the chemical laboratory of the Faculty of Mathematics, University of Muhammadiyah Malang, it was found out that young noni fruit juice contains xeronine (mg/100g) belonging to the colloid compound, the number of the content is as much as 196.7335 mg /100g with a dilution of 1: 1.

Univariate description of the research consists of the distribution of the age and weight of the respondents are shown in tables 1 and 2 below. Bivariate description consists of: (1) The level of Dysmenorrhea before treatment, (2) The level of menstrual pain after treatment, and (3) Decreased levels of Dysmenorrhea, as shown in Table 3 and 4 below and the diagram 1 below.

Table 1. Frequency Distribution of Respondents' Age in 2014

No	The Age of Respondents (Year)	Frequency	Percentage
1.	17	1	4.0
2.	18	13	52.0
3.	19	8	32.0
4	20	3	12.0
Total		25	100.0

Table 2. Frequency Distribution of Respondents' Body Weight in 2014

No	Body Weight (Kg)	Frequency	Percentage
1.	< 40	1	4.0
2.	40–45	9	36.0
3.	45–50	7	28.0
4.	50–55	4	16.0
5.	55–60	3	12.0
6.	> 60	1	4.0
Total		25	100.0

Table 3. Frequency Distribution of the level of Dysmenorrhea before treatment in 2014

No	Level of Pain	Frequency	Percentage
1.	No pain	0	00
2.	Mild pain	1	4.0
3.	Moderate pain	17	68.0
4.	Intense pain	7	28.0
5.	Very intense pain	0	0.0
6.	Excruciating pain	0	0.0
Total		25	100.0

Table 4. Frequency Distribution of the level of Dysmenorrhea after treatment in 2014

No	Level of Pain	Post test I		Post test II	
		Frequency	Percentage	Frequency	Percentage
1.	No pain	6	24.0	18	72.0
2.	Mild pain	13	52.0	6	24.0
3.	Moderate pain	6	24.0	1	4.0
4.	Intense pain	0	0	0	0.0
5.	Very intense pain	0	0	0	0.0
6.	Excruciating pain	0	0	0	0.0
Total		25	100.0	25	100.0

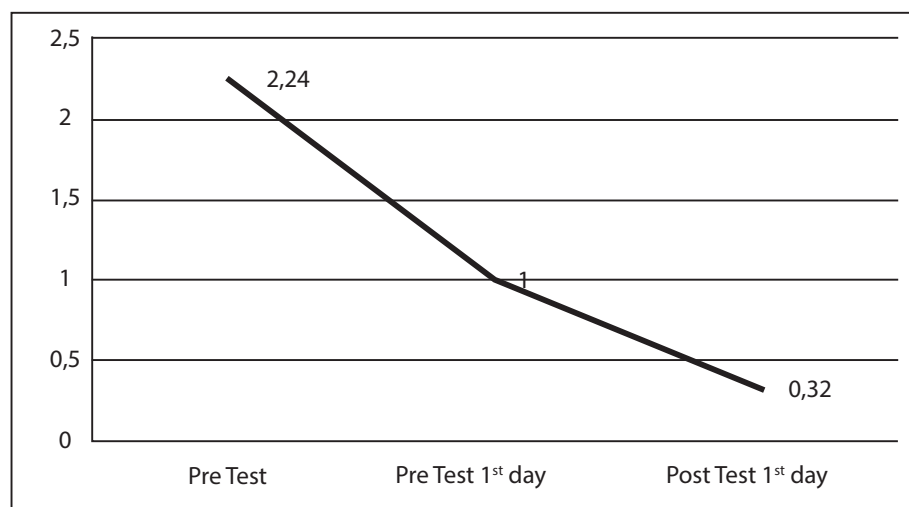


Figure 1. Graphic of the Average Decrease of Dysmenorrhea Trendon Pretest and Post test

The study found a significant decline in pain where the average rate of incidence of pain before administration of noni is 2.24, but after given the noni juice then the average rate of incidence of pain on the posttest respondents on the second day was at 0.32. The average reduction in pain on the first day

was 1.24 and on day II was 0.68, as shown in Figure 1.

To determine whether there are any differences before and after administration of noni, the Wilcoxon statistical test shows the following results:

Table 1 shows that most respondents (13 people/52%) are at the age of 18 years old, while Table 2 shows that most respondents (9/36%) in the range of 40–45 kg body weight.

Table 3 shows that the respondents' level of menstrual pain before treatment

was at moderate pain with 17 people (68%), and 7 people (28%) were at intense pain. Table 4 shows that the respondents' level of menstrual pain after treatment were at no pain category at the highest score (18 people/72%,  $n = 25$ ) and mild pain category with 6 people (24%,  $n = 25$ ).

Table 5. Analysis results

	Post Test – Pre Test
Z	-4.549
Asymp. Sig. (2-tailed)	0,000

- a. Based on positive ranks
- b. Wilcoxon Signed Ranks Test

If the probability (Asymp. Sig. (2-tailed))  $< 0.05$  then there is a difference before and after administration of noni. If the probability (Asymp. Sig. (2-tailed))  $> 0.05$ , then there is no difference before and after the administration of noni. From the analysis above it can be concluded that there is a very significant difference before and after the administration of noni against menstrual pain, this is evidenced by the p-value (0.000) which is far below the level of significance (0.05).

## DISCUSSION

Dysmenorrhea level assessment results before the teenage girls were given noni fruit juice using a verbal descriptive scale (VDS) obtained the highest level of pain at the level of moderate pain and severe pain. This is possible because the process of dysmenorrhea experienced by teenage girls

is a physiological thing where dysmenorrhea, or menstrual pain may occur before or during menstruation. Based on the data, more than 50% of teenage girls often experience the primary Dysmenorrhea. Pain in the primary Dysmenorrhea is caused by endometrial prostaglandin containing high amounts causing contraction of the myometrium that are able to constrict the blood vessels, resulting in ischemia, the disintegration of the endometrium, bleeding and pain (Morgan, 2009).

The intensity of menstrual pain that arises is depending on the health and psychological condition of the youth. The girls who are emotionally unstable, especially if they are not well informed on the process of menstruation, will be easily experiencing dysmenorrhea (Sarwono, 2005). Similarly, constitutional factors can reduce resistance to pain.

The largest age category is at the age of 18 years (52.0%), this enables teenage girls to experience primary dysmenorrhea. Primary dysmenorrhea is a menstrual pain with no real abnormalities in genital properties. Primary dysmenorrhea occurs sometime after menarch, usually after 12 months or more, because menstrual cycles in the first months after menarch generally are in anovulator type and not accompanied by pain (Sarwono, 2005). It usually occurs between the age of 15–25 years old and then disappear at the age of late 20s or early 30s. Besides it is also common at the age of less than 20 years old and usually disappears after pregnancy ([www.etd.eprints.ums.ac.id](http://www.etd.eprints.ums.ac.id)). Primary dysmenorrhea arises in adolescence, i.e 2-3 years after the first period and occurs in less than 20 years of age (Anonymous, 2007).

The pain arises shortly before or together with the onset of menstruation and lasts a few hours, although in some cases it can take several days (Wiknjastro, 2005). Based on interviews during the study, the pain experienced by teenage girls in Health Polytechnic of Malang and STIKES Kendedes Malang is generally for 2 to 3 days prior to and at the beginning of menstruation with different intensities, ranging from no pain to the most severe pain. Some common efforts to overcome the pain are by taking analgesics, consuming herbal drinks to decrease menstrual pain, doing a warm compress on the stomach, pressing the stomach with a pillow or making some distraction.

Dysmenorrheal level assessment results after the respondent was given juice fruit juice using a verbal descriptive scale (VDS)

obtained the highest level of pain at no pain level (72%) and mild pain (24%). This is possible with the treatment given where the teenage girls drink noni fruit juice with a dose of 9 ml/BW taken 3 times daily for 2 days which contains the active ingredient of xeronine. Based on the analysis method of Chromatography High Performance Liquid Chromatography (HPLC) to identify the active substance content of noni fruit juice done in the chemical laboratory of the Faculty of Mathematics, University of Muhammadiyah Malang, it was found out that unripe noni fruit juice contains xeronine (mg/100g) belonging to the colloid compound, the number of the content is as much as 196.7335 mg/100g.

Xeronin is an alkaloid the human body which is needed to activate the enzyme and to organize and form the structure of proteins, and are analgesic, relieve headaches, and nerve muscle pain (Solomon 1998, in Puji Rahayu, 2006). In the process of pain, xeronine changing receptor proteins in the brain become activated to bind endorphins. Endorphin is an endogenous opioid polypeptide that functions as a neurotransmitter, is produced by the pituitary gland and the hypothalamus as an anti-pain.

Waha MG, (2007) describes one important alkaloid found in Noni is xeronine. Xeronine is produced also by the human body in a limited number that serves to activate enzymes and regulate the function of proteins in the cell. Xeronine was first discovered by Dr. Ralph Heinicke (a biochemist). Although the Noni fruit contains very little xeronine, but it contains ingredients to form (precursor) xeronine, namely proxeronine in large

quantities. Proxeronine is a type of colloid acid that does not contain sugar, amino acids or nucleic acids such as other colloids with a relatively large molecular weight, more than 16.000. When we consume the proxeronine, the xeronine levels in the body will increase. Normally, proxeronine is stored in the liver and are periodically released into the bloodstream to be absorbed by the organ as needed. Human tissue cells contain receptors, a binding with xeronine. In the human body, proxeronase enzymes and other substances will turn proxeronine into xeronine. The main function of xeronine is to regulate the shape and rigidity (hardness) of specific proteins present in the cell. It is important to remember when these proteins function abnormally; the body will experience health problems.

Wilcoxon statistical test analysis results show that there is an influence of noni fruit juice to decrease pain where there is a significant difference from the average reduction in menstrual pain levels before and after administration of noni juice ( $p = 0.00$ ). This proves that the noni fruit juice at a dose of 9 ml/bw taken 3 times daily is effective in reducing dysmenorrhea in adolescent girls. The results of this study supported Solomon's statement (1998) in PujiRahayu (2006) who states that noni fruit contains Xeronin bioactive which is an alkaloid the human body which needs to activate the enzyme and to organize and form the structure of proteins, and are analgesic.

Menstrual pain usually occurs a few hours before or after a menstrual period and can continue up to 48–72 hours. Painful menstruation (dysmenorrhea) is described

as similar-spasmodic convulsions, localized in the lower abdomen (supra-pubic area) and can spread to the thighs and lower back, can be accompanied by nausea, vomiting, diarrhea, headache, lower back pain, irritability, fatigue etc.

Painful menstruation (primary dysmenorrhea) may occur because of psychological/stress which causes an increase in stress hormones vasopressin and catecholamine that occurs because of the imbalance or  $\text{PGF2}\alpha$ :  $\text{PGE2}$  causing vasoconstriction of blood vessels that cause ischemia and cell damage. This causes uterine contractions (disrhythmic) which then lead to the perception of pain. Noni contains xeronine which has analgesic properties and also contains scopoletin which serves to widen the narrowing blood vessels and make blood circulation better, thus reducing disrhythmic contractions that cause the pain.

The dose given in this study is a dose that is safe and non-lethal. This is evidenced by the absence of significant complaints from the respondents such as diarrhea, vomiting, dizziness-headache, etc.

The results also support previous research which say that the first phase of research on the effect of noni fruit juice to pain and toxic effects which were performed on 36 guinea pigs (*Rattus norvegicus*), shows that unripe noni fruit juice is proven to reduce pain response more than 60% on guinea pigs with ripe noni fruit juice and more than 75% for unripe noni fruit.

Based on the above results, it can be concluded that noni has proven its efficacy to decrease menstrual pain, therefore noni fruit juice can be used as an alternative

herbal product in reducing menstrual pain, especially because it is safe for consumption and easy in production. Noni fruit trees are not easy to be found and they are usually planted freely and not for sale, so that the noni fruit is hard to find on the market. The cultivation of noni fruit is generally for the treatment of high blood pressure or hypertension, therefore this fruit needs to be more cultivated to be able to make use of the products more. The people are expected to take more advantages from this plant as an alternative to overcome the problem of menstrual pain.

## CONCLUSION AND RECOMMENDATION

### Conclusion

Menstrual pain level before treatment in most teenage girls is at the level of moderate pain that is 17 people (68%, n = 25) and there are 7 people in severe pain (28%, n = 25). While most teenage girls feel no menstrual pain after treatment (18 people/72%, n = 25) and 6 people (24%, n = 25) has mild pain. There are significant differences in the average level of menstrual pain before and after the administration of noni ( $p = 0.000$ ), so that the Noni fruit juice has significant effect in reducing the level of menstrual pain in teenage girls.

### Recommendation

For teenage girls with dysmenorrhea, it is recommended to consume the unripe Noni fruit juice at a dose of 9 ml/KgBW 3 times daily as an alternative to reduce menstrual pain. Further studies need to be done about the phytochemical content and associated processing methods using noni as one of

the herbal products that is safe to reduce menstrual pain. Re-cultivation of the noni fruit crops is needed.

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# PROBIOTIC SUPPLEMENTATION TOWARD DECREASING ALLERGIC CLINICAL MANIFESTATION ON CHILDREN AGED BETWEEN 3–6 YEARS

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## ABSTRACT

**Introduction:** Allergy is a health problem that keep increased in number of occurrence for years. So far, allergic management has only focused on symptomatic-therapy and immunotherapy. One of the prevention strategies for allergic manifestation is probiotic supplementation which is based on active induction of immunologic response. The purpose of this study was to examine the influence between probiotic supplementation toward allergic clinical manifestation on children aged between 3–6 years. **Method:** The research design was *Quasi-experiment* with all of 3–6 year aged children from Al-Ihsan Kindergarten and Dharma Wanita Persatuan Kindergarten located at Sumber Porong Village Lawang being examined as population. Samples are taken from some of the population with *Random Sampling Technique*. **Results:** Result showed as the major part of experimental group did not show any clinical manifestation of dermatitis atopic, urticarial and rhinitis allergic, on the contrary, the major part of control group did. Result of *Phi-coefficient test* gives p value in order: 0.554, 0.033 and 0.013 which means there is significant difference in urticarial and rhinitis allergic occurrence between experimental and control group. Clinical manifestation of asthma did not show in both of the group. Result of *Mann-Whitney test* gives  $p=0.005 < p=0.05$  which means there is significant difference in clinical manifestation of dermatitis atopic between experimental and control group. **Discuccion:** This study proved that probiotic supplementation may prevent clinical manifestations of allergies and reduce the frequency of recurrence of allergy due to the probiotic able to control the balance of intestinal microflora.

**Keywords:** *probiotic supplementation, allergic clinical manifestation, children aged between 3-6 years*



# THE ROLE OF HUSBAND IN ANTENATAL CARE VISITS DURING PREGNANCY

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## ABSTRACT

**Introduction:** The problem role husband is included on the responsibility husband to the wife during pregnancy, although in fact there is still a husband that are less role in pregnancy until ahead of labor his wife, this is due to the lack of knowledge husband about his role in pregnancy. Characteristics of the role is often vary depending of social factors, culture, economic, and less information obtained husband in the social life. The research objective is to know the role of husband to pregnant women in implementing the visit antenatal care in the working area of health center Kaubele District Biboki Moenleu District Middle East North 2014. **Method:** Descriptive study using the survey methods. Number of population 121 husband and sample 40 husband. The sampling technique is accidental sampling, research instruments with the questionnaire, processing and data analysis using statistical analysis deskriptif. **Results:** The role of husband to pregnant women in the form Ready to the support 87.5 percent and less support 12.5 percent. The role of husband to pregnant women in the form of Delivery&Take care of the support 100 percent. **Discussion:** Most of the husband support the pregnant women in implementing the visit antenatal care in the working area of health center Kaubele.

**Keywords:** *the role of husband, pregnancy, pregnant women, antenatal care*

## THE DIFFERENCES IN WEIGHT GAIN AMONG FORMULA-FED BABIES COMPARED TO BREAST-FED BABIES

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### ABSTRACT

**Introduction:** Formula milk have different nutritional substances from breast milk. Colostrum in breast milk can protects infants from infectious diseases that can affect weight gain, especially for neonates. **Method:** The research was a comparative analytical study with cross sectional approach. The samples were totally 30 infants aged 1 month, divided into two groups (breast-fed babies group and formula-fed or PASI-fed babies group). Samples were taken by quota sampling technique according to the inclusion criteria. Baby weight measurements were used baby scale device. The data was analyzed by Mann Whitney U-tets with significance value  $\alpha=0.05$ . **Results:** Mann Whitney test statistic showed significance value of 0.042 ( $p < 0.05$ ) which means that there are differences in weight gain among formula-fed babies compared to breast-fed babies. **Discussion:** Breast milk is best food for babies to grow well and have an ideal body weight, but differ in neonates with formula-fed, their growth will likely increase to be overweight (obese).

**Keywords:** *weight gain, breast-fed, formula-fed*

## INTRODUCTION

One effort to increase human resources begins with a focus on growth and development in the womb, followed by exclusive breastfeeding as early as possible (Roesli, 2010). Breastmilk is an emulsion of fat in the solution of proteins, lactose, and mineral salts of organic secreted by glands mammary mother, useful as the best food for babies up to the age of the first 6 months (Baskoro, 2008) but it would be a problem if the baby can not be breastfed caused by a variety of conditions and circumstances. Exclusive breastfeeding in Indonesia have not been fully implemented, this condition has triggered the poor health status of infants and toddlers. The main problem is a constraint low coverage of breast milk is the socio-cultural factors, lack of awareness of the mother or the family of the importance of breastfeeding and the promotion of infant formula that causes formula-feeding to infants before six months of age are increasingly being found in both rural and urban areas (Yesie, 2010).

## METHOD

The population was all babies aged 1 month in Village Polehan Blimbing Malang in February till March 2012. The population included 30 infants, divided into 2 groups: 15 infants aged 1 month breast-fed and 15 infants aged 1 month formula or PASI given. The criteria for inclusion of respondents in this study is a baby with birth at term, the age of one month, not given stimulation can stimulate weight gain such as baby massage and baby's parents are willing to become respondents

This study was a comparative analytical study with cross sectional approach, the researchers observed the independent variables and the dependent variable at one time without giving an intervention. Weight measurements of respondents use baby scales and the results recorded in the observation sheet, whereas for the history of breastfeeding and formula or PASI using an interview guide form and to support data researchers conducted a study of the medical record documentation and KMS respondents.

## RESULT

20% of 15 respondents in the group receiving breast milk showed showed an increase in excess weight, good 73% and enough 7%. While the group of respondents who received formula milk intake showed 67% showed an increase in excess weight, a good 14% and enough 3%. Mann-Whitney test result shows p value:  $p = 0.042 < p = 0.05$  the which means there is significant difference weight gain in infants who received breast milk intake and milk formula.

## DISCUSSION

The results showed that 15 respondents who were breastfed obtained 11 infants (73%) included in both categories and 1 infant (7%) included in the category enough, so that said weight gain most of the breastmilk-fed group of respondents included in either category. Results of this study occurred because breast milk is the most perfect food for newborns where the nutritional content has composition accordance with baby's digestion, so the growth of the baby's body to be balanced and ideal.

Breastmilk as a perfect source of nutrition which contains high-quality nutrients that are useful for growth. All types of nutrients contained in breast milk, the vast majority were in fat (50%) of about 200 species. The main types of fat contribute 90–95% of total milk fat. Among the most important is the LCPUFA (long chain fatty acids are polyunsaturated) with two major nutrients, namely DHA (dekosaheskaenoat acid) and ARA (arachidonic acid) in a high concentration. Nutrition plays an important role in the growth, cognitive development and vision acuity. Babies who are breastfed have a higher LCPUFA levels in plasma, red blood cells, and tissues that can stimulate the growth of baby's immune system. Breast milk also contains Whey/lactalbumin (main protein of milk is a liquid that is easily digested) more than Casein/whey (the main protein of milk in the form clots) in the ratio 60:80, while milk formula made from cow's milk has a ratio of 20% protein and 80% Whey Casein protein.

According to Anisa (2011) this ratio causes the milk proteins more easily absorbed by the baby's body had immature gastrointestinal system. Besides breast milk is a substance that is easily digested because it contains enzymes that help digestion, among others Lipase (to describe the fat), Amylase (for outlining carbohydrates), and protease (to degrade proteins). The composition of breast milk is also tailored to the needs of the baby. According Roesli (2010) that breast milk is a substance of life which is always different in composition from time to time, adapted to the nutritional needs. For example colostrum (the clear liquid yellowish usually come out

at the beginning of the birth until about a week later) shown to have levels higher protein and fat and lactose (milk sugar) is lower than the breastmilk mature (milk out up to 10 days after baby birth). The content of colostrum like this will help the newborn baby's digestive system is not yet functioning optimally. Besides the composition of breast milk that came out at the start of breastfeeding/first 5 minutes (fore milk) is different in composition to human milk that came out at the last minute breastfeeding (hind milk) and protein fore milk is high but the fat content is lower than the hind milk that 45 times more. Hind milk can be filling the baby's stomach. Although the baby looks healthy, the baby's weight gain only got fore milk is not good, then do not be too quick to move the baby to suckle on the other breast. This is in accordance with the disclosed by Sarwono (2008) that the mother's milk (ASI) is the sole and natural food for babies because breast milk contains nutrients that are complete include 88.1% water, 3.8% fat, 0.9% protein, 7% lactose, and 0.2% in the form of HA, DAA, Sphingomyelin and other nutrients. In addition it is also easy to digest breast milk, provides protection against infection, always fresh, clean, and ready to drink every time.

The data showed that the results of weight gain formula or PASI largest group of respondents in the category of more than 10 infants (67%). Seeing the results of these studies found the average formula-fed infants in more categories. These results occur because the nutrient composition of the formula is always the same for every time a drink (according to the manufacturer's instructions). Formulas do not vary from the

beginning until the end of breastfeeding, from the first day to the seventh day, to the thirtieth day. Not all the nutrients contained there in can be absorbed by the baby's body. For example milk protein formula with cow dairy ingredients are not easily absorbed because it contains more casein. Additionally formula is also difficult to digest because it does not contain digestive enzymes. A series of production processes at the plant resulted in digestive enzymes do not function. Though the digestive system and metabolism of the newborn have not functioning optimally so that the nutrients that were not entirely digested and absorbed by the baby's digestion, nutrients will eventually accumulate in the baby's body. If this is the case for a long time did not rule out the baby will be impaired nutritional status and toxicity in the body. Malnutrition and over nutrition equally good no impact.

According Pritasari in Nakita (2012) that undernourished/bad cause stunted physical growth, low immunity so susceptible to disease, and brain developmental delay. While nutrition will not only disrupt the aesthetic appearance, but also triggered the emergence of a variety of degenerative and cardiovascular diseases, such as diabetes mellitus and heart problems. According to Narendra et al., 2008 that PASI administration should be adapted to maturity of baby's digestive tract and needs. In addition to the good category on the research results are also obtained two respondents who experienced a weight gain of less category, this is due to the baby has diarrhea. This can occur because the formula given to infants

experiencing environmental pollution due to the lack of clean water supply. Formula feeding to an infant must always pay attention to hygiene factors. Bottle of milk and formula are particularly vulnerable to contamination and a good medium for breeding bacteria that cause infections such as diarrhea. In the formula there is no colostrum containing antibodies, especially IgA (Immunoglobulin A), which can protect from infection, especially diarrhea. According Utami Roesli (2010) that colostrum is the milk that is rich special immune substances, it is important for resistance to infection, it is important to growth gut, even the survival of the baby. Aside from being the first immunization, colostrum also create a layer that protects the baby's gut wall and also finalize the intestinal wall young.

The result showed respondents breastfed group no ill (15 infants or 100%), while respondents PASI is ill (4 babies or 26.67%), this happens because breast milk contains protective substances while in formula milk contains little immunoglobulin. According Roesli (2010) that At the time of birth until the baby is a few months old, the baby has not been able to establish itself completely immune. Breastmilk is able to provide protection either actively or passively, because breast milk alone does not provide protection against infection, but also stimulate the development of baby's immune system. Breastmilk provide antibodies that can not be made by a baby who will protect various kinds of infections whether caused by bacteria, viruses, fungi or parasites. Breast milk also contains anti-inflammatory substances.

Colostrum contains white blood cells and germ killer immunoglobulin proteins in the highest amount, at the time of the baby's body defense system is still low. So it can be said that the colostrum is first immunization received by the baby. Immunization process by breastmilk will always be adapted and adjusted to the bacteria which are located around the mother and baby.

The results based on the characteristics of the position of the child in mind that the majority of respondents formula-fed PASI group is the first child of 10 infants (67%) and the respondent group of breastmilk is the second child as much as 5 infants (33%). The position of the child in the family can affect a mother to breast-feed. Attitude mother against breastfeeding is influenced by several factors, among others: Experience Nursing mothers on previous child, feeding habits in the family or among relatives, knowledge mother and her family about benefits of breastfeeding, as well as the attitude of mother to her pregnancy affect the decision mother is breastfeeding or not. The results based on job characteristics mothers breastfed group of respondents note that 13 (86.67%) is not working and the mother of respondents PASI group of 8 (53.33%) are private sector workers. This is in line with the opinion (Roesli, 2010) which states often have a dilemma in working mother to breastfeed her baby even though this group knows the benefits and superiority of breast milk, but difficult to practice. Allocation of daily working time which many are beyond the home and place of work so that mothers do not fully breastfeeding, will

usually be accompanied with the formula. When in fact the mother who works full still be breastfed exclusively by way of milking. In principle, breastfeeding can be given directly or indirectly. Giving directly by way of breastfeeding, while breastfeeding is not directly done by flushing or pumping, storing them and then given to infants.

In fact, many working mothers to stop breastfeeding for reasons did not have much time. Eventhough work is not a reason for the termination of breastfeeding. Correct knowledge about breastfeeding, completeness pumping and work environment support, a mother to breast feed exclusively. The results are consistent with research Rokhani (2007) which states that the success of breastfeeding, especially exclusive breastfeeding for infants can be affected by factors of work, attitude, and knowledge of breast-feeding mothers. The results of the field study also showed that working mothers are less likely to breastfeed their babies exclusively. This is because they are too busy and can not leave their jobs for a long time, so they get used to their baby to suckle from a bottle early on. Whereas working mothers could also be taking the time to provide breast milk to their babies because breast milk has a very important meaning for the growth of the baby (Baskoro, 2008).

## CONCLUSION

Breast milk is best food for babies to grow well and have an ideal body weight, but differ in neonates with formula-fed, their growth will likely increase to be overweight (obese).

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# HEALTH EDUCATION USING THE POP-UP BOOK LECTURE METHOD HAS EFFECT ON THE LEVEL OF CLEAN HEALTHY LIVING BEHAVIOUR KNOWLEDGE AND ATTITUDE IN GRADE 2 STUDENTS AT ELEMENTRY SCHOOL GREAT RIVER 8 BANJARBARU

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## ABSTRACT

**Introduction:** The knowledge of students about Clean Healthy Living Behaviour in schools is still low, especially about choosing healthy snacks, wash their hands and dispose of waste in place. So that school children need a good knowledge and a positive attitude to implement Clean Healthy Living Behaviour (CHLB). This study aimed to analyze the health education lecture media pop-up book to the level of knowledge and attitude of CHLB in school students of class 2 Elementry School Great River 8 Banjarbaru. **Method:** This study used a pre-experimental (one group pre-post test design). The population is all students in grade 2 at the Great River 8 Banjarbaru using total sampling technique. The sample in this study amounted to 72 people. The independent variable in this study is a health education with media pop-up book and the dependent variable is knowledge CHLB and attitudes about school. Data were collected using a questionnaire and analyzed using statistical test of Wilcoxon Signed Rank test with significance level  $\alpha \leq 0.05$ . **Result:** Statistical analysis showed health education media pop-up book has a significant effect to increase knowledge ( $p = 0.000$ ) and attitude ( $0.000$ ) about CHLB in school students of class 2 Elementry School Great River 8 Banjarbaru. **Discussion:** This study health education with media pop-up book effect on knowledge and attitudes about second grade students of Elementry School CHLB Great River 8 Banjarbaru. Schools are expected to be able to use the media pop-up book as alternative medium of learning for students, especially in healthy habits.

**Keywords:** *health education, pop-up book, knowledge, attitudes, clean healthy living behaviour*



# THE CORRELATION OF TYPE OF CHILDBIRTH WITH PRESCHOOL MOTORIC DEVELOPMENT IN TK KEMALA BHAYANGKARI 4 PALEMBANG

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## **ABSTRACT**

**Introduction:** Development target on *Millennium Development Goals* (MDG's) according to agreement with some countries in PBB organization to be achieved on 2015, reached people's welfare and community development such as reduce infant mortality, indirectly type of childbirth give influence to children development. Type of childbirth with forceps or vacuum can influence on children development because of head traumatic or birth traumatic when childbirth process. The purpose of this research was to knew the correlation type of childbirth with motoric development on children preschool in TK Kemala Bhayangkari 4 Palembang year 2015. **Method:** This research was used design *survey analytic* with *cross sectional* approach. Populations are mothers and children aged preschool in TK Kemala Bhayangkari 4 Palembang. There were 53 respondents by total sampling technique. The instrument was used a questioner. **Results:** Results of univariat data, there were 25 (47.2%) respondents had "good" motoric development, and 42 respondents (79.2%) had "normal" motoric development. Bivariat data analysis by chi square showed that there was correlation between type of childbirth with motoric development on preschool children in TK Kemala Bhayangkari 4 Palembang with score of  $\rho$  value = 0,016 ( $< \alpha = 0,05$ ). **Discussion:** Based on this result, there excepted by teacher on school can learn and do screening children motoric development.

**Keywords:** *type of childbirth, motoric development on children preschool*

## INTRODUCTION

According to WHO data on 2006, more than 200 million children preschool in this world failed to reach cognitive and social development. It can lead to retardation of development and skills such as autism, intellectual disability, attention deficit and also speech delay. Faculty of Medicine University of Indonesia (2000) estimated there were approximately 6,900 children with autism in Indonesia. Not only autism, developmental disorder such as ADHD (Attention Deficit Hyperactivity Disorders) also become a concern with prevalence 3–5%. So far, more than 10% of children in Indonesia suffer ADHD, which is estimated 7 cases every year, while many other developmental disorders in children such as speech delay and language disorders 56.61% and delay of sitting or standing 10.09% (Suryawan & Narendra, 2010).

According to UN reports related to the problem of children (UNICEF), child mortality rate in Indonesia is relatively high. In a statement, Chief of Child Survival and Development, UNICEF, Dr. Robin Nandy, said that nowadays, estimated 150,000 children died in Indonesia every year before they reach the age of 5 years (Fida & Maya, 2012).

Some types of childbirth can leave traces traumatic to baby such as section caesaria (SC), forceps, vacuum, obstructed childbirth and lack of oxygen. Genetic and other factors also can effect, children who experience trauma at birth would be more prone to psychological problems (Rufude, 2010).

Type of childbirth gives an important role in gross motor development in

infants. Research conducted by Dr William Emerson, PhD, psikiater from USA, with title “Birth Trauma: The Psychological Effects of Obstetrical Intervention”, found that 95% of births take place in America is traumatic, 50% moderate trauma, and 45% of severe trauma.

The trauma will determine the child’s mental behavior while growing up, how the children express feeling love, communication, behaviour, make decisions, etc (Firdaus, 2012).

According to the early detection of growth and development, children under five years in Dinas Kota Palembang, 2011 years equal to 86%. In 2012 increase equal to 90%. In 2013 increase equal to 90,8% with number of children under five years equal to 112,844 (Dinas Kota Palembang, 2013).

Based on preliminary studies in TK Kemala Bhayangkari 4 Palembang on February 6<sup>th</sup> 2015, there were 53 students aged preschool. The results of interviews from five mothers, two mothers with normal childbirth have children with good motoric developmental, one mother with abnormal childbirth have children with hesitate motoric developmental, and two children who abnormal childbirth have children with abnormal motoric developmental. This study was aimed to identified the correlation between type of childbirth with motoric development preschool TK kemala Bhayangkari 4.

## METHOD

This research was a survey analysis with cross sectional approach. Population of this research were all mothers with children

preschool in TK kemala Bhayangkari 4 Palembang. There were 53 respondents by total sampling technique.

There were 2 variable in this research, type of childbirth and motoric development. Type of childbirth identified by questionnaires and was categorized as follow:

1. Normal: childbirth process spontaneous
2. Abnormal: childbirth use tools (vacuum, forceps) or *sectio caesaria* (SC) (Rohani & Marisah, 2011).

The motoric development in preschool children by KPSP categorized as follow:

1. Good: if the answers "yes" 9 or 10
2. Suspect: if the answers "yes" 7 or 8
3. Diverge: if the answers "yes" 6 or <6 (Sulistyawati, 2014).

Univariate data analysis use to know frequency distribution from each variables, bivariate data analysis with statistic *Chi Square* to know the correlation each variabel.

## RESULTS

Table 1. Frequency distribution of Children's Motoric Development

Children's Motoric Development	Frequency	(%)
Good	25	47,2
Suspect	21	39,6
Diverge	7	13,2
Total	53	100

According to table above 25 respondents (47.2%) had "good" motoric development, while 21 respondents (39,6%)

had "suspect" motoric development, and 7 respondents (13.2%) had "diverge" motoric development.

Table 2. Frequency Distribution of Type of Childbirth

Types of Childbirth	Frekuensi	(%)
Normal	42	79,2
Abnormal	11	20,8
Total	53	100

According to table above, there were 42 respondents (79,2%) had normal childbirth and abnormal childbirth 12 respondents (20,8%).

Table 3. Correlation Type of Childbirth with Children's Motoric Development

Types of Childbirth	Children's Motoric Development					
	Good		Suspect		Diverge	
	n	%	n	%	n	%
Normal	23	54,8	16	38,1	3	7,1
Abnormal	2	18,2	5	45,5	4	36,4
Total	25	47,2	21	39,6	7	13,2
$\rho$ value = 0,016						

According that table statistical test showed there was correlation between type of childbirth with children's motoric development in TK Kemala Bhayangkari 4 Palembang 2015 ( $\rho$  value < 0.05).

## DISCUSSION

William James said children with traumatic childbirth can give trauma with children.

This statement is formulated into a theory of birth influence on the development of children's personality (Otto Renk's Theory about birth trauma). The way of childbirth has high incidence in the influence of gross motoric development in infants. According to this theory, childbirth with traumatic can cause anxiety with the children as a disruptive influence throughout life.

Type of childbirth also plays an important role in the development of gross motor skills in infants. Research conducted by Dr. William Emerson (2000) found that 95% of births take place in America is traumatic. From that number, 50% moderate trauma, and 45% major trauma. That traumatic will determine the children's mental behavior while growing up, began what he knew and express love, communicate, behave, make decisions, etc. (Firdaus, 2012)

According to the research results, theory, and research related there's many factors give affect the development of children, but indirectly the development of children affected by various childbirth techniques, in this case the complications that often occur in artificial parturition action, such as vacuum usually caused by too long and too strong so can give the risk of brain hemorrhage tend to be larger. Various techniques of childbirth with the complications, can give effect or influence on the children's intellectual development and intelligence.

According to Rufude (2010), indirectly type of childbirth can affect to early childhood development later. Type of childbirth with forceps or vacuum can affect on early childhood development such as head trauma or birth trauma during childbirth process.

According to Seidman, dkk (1991) research in West Jerusalem Hospital, children born spontaneously intelligence has a score of 105, 104 births with forceps, children born with vacuum extraction section 105 and the operation sesarea 103. The range IQ is not much different can be seen that indeed there is influence between childbirth techniques with intelligence, but not too noticeable difference. The possibility of such differences, there was a technical error during childbirth. Such as contraction, or unexperts helper.

From the research results, theory, and research related found that childbirth techniques can give effect to the intelligence of children born even though the range of IQ is not much different.

From the above statement at the same time also denied that childbirth cesarean section surgery makes children born to become smarter. Because in reality, a lot of risks that should be happen with the mother or children during childbirth when not using the proper technique. Moreover, IQ intelligence environment affected more than genetics.

Some types of childbirth can give traumatic to the baby include traumatic birth by cesarean, forceps, vacuum, experiencing prolonged labor, and lack of oxygen. Children with traumatic childbirth likely to be anxious or aggressive. Genetic and other factors also give an effect, children with traumatic childbirth would be more prone to psychological problems (Rufude, 2010).

Results of this study are not consistent with research conducted by Siti Annadhoroh in 2007 on Vacuum Extraction Effect on gross motor development in the DR. Sardjito,

there is no significant relationship between vacuum extraction effect on gross motor development in infants where the value  $p$  value of 0.352.

From the research results, theory, and research related to researchers assume that childbirth techniques give effect to motoric development of children, because one of the factors that influence child development is the childbirth factor. One of childbirth factors influence the development of children, namely childbirth with traumatic both in vacuum, forceps, and surgery.

From the above statement also denied that childbirth with cesarean makes children born become more intelligent. In reality, a lot of risks when childbirth process use the wrong technique. IQ intelligence environment affected more than genetics.

## CONCLUSION AND RECOMMENDATION

### Conclusion

According to result of research, it can be concluded that majority children had good motoric development in TK Kemala Bhayangkari 4 Palembang .

Mostly children had "normal" type of childbirth in TK Kemala Bhayangkari 4 Palembang.

There was correlation between type of childbirth with children's motoric development in TK Kemala Bhayangkari 4 Palembang.

### Suggestion

According to discussion and conclusion, so the suggestion are:

Teacher should learn and do screening on student's motoric development in TK

Kemala Bhayangkari 4 Palembang.

This results research can give information and idea as material reference to develop scientific and as reference about the type of childbirth with motor development of pre-school age children. As well as educational institutions expected to further improve a quality of education in order to enhance the framework and process of research, either by extending the books about health and nursing in general.

Future research is expected to develop and enhance this research as well as developing other factors that affecting children's motoric development.

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# EFFECTIVENESS OF CHEWING GUM AND EARLY MOBILIZATION ON THE RECOVERY OF GASTROINTESTINAL MOTILITY WOMAN AFTER CESAREAN SECTION IN RSKDIA SITI FATIMAH MAKASSAR

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## **ABSTRACT**

**Introduction:** Cesarean section is the most common surgery associated with post-operative changes in nervous system and leading to decrease bowel movements. Some study has demonstrated the use of chewing gum in post-operative period in order to fasten recovery of gastrointestinal motility, however in Indonesia still unknown. Therefore, this research will assess the effectiveness of chewing gum and early mobilization in return of gastrointestinal motility patients after cesarean section in RSKDIA Siti Fatimah Makassar. **Method:** A Pre Experimental Design, Static Group Comparison method, 20 patients undergoing elective cesarean section divided into 2 groups. Gum chewing and early mobilization as study group ( $n=10$ ) and early mobilization as control group ( $n=10$ ). Patients in study group postoperatively chewed sugar free gum every 4 hour start from 4<sup>th</sup> hour after surgery for 30 minutes each chewing until the first flatulence. There is no significant different between 2 group regarding to patient demographic, intra-operative, and post-operative care. **Result:** There is a significant different between mean time of gastrointestinal recovery signed by the appearance of the first flatulence which was significantly shorter in the study group with  $P=0,047$ . **Discussion:** The study result demonstrated that the use of early mobilization plus chewing gum was effective on recovery of gastrointestinal motility after cesarean section. It also can be used as a postoperative nursing interventions for it benefit, easy, harmless, and inexpensive postoperative intervention.

**Keywords:** *chewing gum, early mobilization, gastrointestinal motility, flatulence*

## INTRODUCTION

Cesarean section is the most common abdominal surgery associated with post-operative changes in autonomous nervous system and leading to decrease bowel movements and driven problems (Ledari FM, 2013). Cesarean section rates are high and continue to rise in developed countries (A. Lauer: WHO, *World Health Report*, 2010).

Data from the medical record of Siti Fatimah Mother and Children Hospital Makassar shows that the number of mother who have cesarean delivery this last three years were: 23, 38 Percent in 2011, 30,75 Percent in 2012, and 30,91 Percent in 2013. Based on these data, it is shown that the number of cesarean section was increasing year by year (Medical Record RSKDIA Siti Fatimah Makassar, 2014). Henri Kehletin 2008 wrote some rehabilitative intervention that can fasten the recovery of normal gastrointestinal function after abdominal surgery. In his review, Kehlet says that chewing gum and early mobilization as some rehabilitative interventions after abdominal surgery.

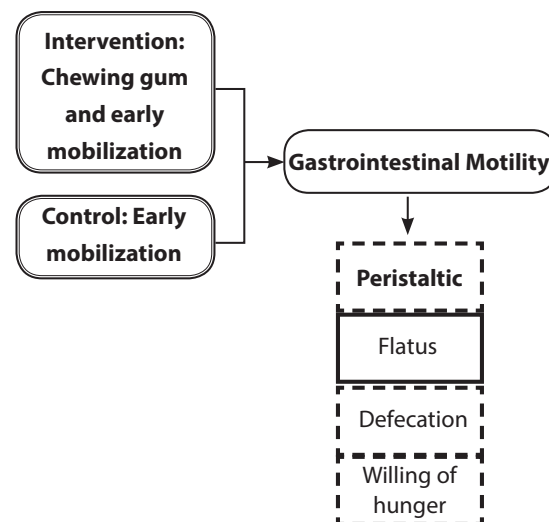
Velocity of the recovery of normal gastrointestinal function of mother after cesarean section will lead to give benefit in recovery process where oral intake fulfilled, so that the nutrition needs of mother were fulfilled as well. So that it can fasten the recovery all at once. This process can lead to reduce the hospitalization time and decline the hospital cost. Some study has demonstrated the use of chewing gum in post-operative period in order to fasten recovery of gastrointestinal motility and prevent post-operative ileuses. It's also already well known & applied in some

hospital. However, In Indonesia remains unknown.

Based on the background issues, the problem in this research was "how the effectiveness of multimodal intervention chewing gum and early mobilization in return of gastrointestinal motility of mother after cesarean section in Siti Fatimah Mother and Children hospital Makassar?" This research will assess the effectiveness of multimodal intervention (chewing gum and early mobilization) in return of gastrointestinal motility of patients after cesarean section in Siti Fatimah Mother and Children Hospital Makassar.

## METHODS

This research sampling technique using Non-Probability Sampling named Consecutive Sampling. The number of respondents in this study was patients with post-cesarean section of 20 people using 2 groups' intervention models with the details 10 respondents of multimodal intervention group chewing gum and early mobilization as treatment group, and 10 respondents intervention group early mobilization only as the control group.





Explanation:

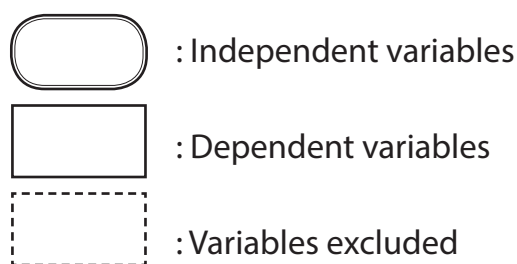


Figure 1. Conceptual Framework

Pre-Experimental Design, with Static Group Comparison Method which is an experimental design by adding a control group. Where after given interventions, the intervention group were observed, while in the control group only observed (Hidayat A.A, 2008).

Table 1. Research Design

Subject	Pre	Intervention	Post
G-A	-	I-A	O-A
G-B	-	I-B	O-B

Explanation :

- G-A : Subject (intervention group)
- G-B : Subject (controlled group)
- : Not observed and not given intervention
- I-A : Multimodal Intervention (chewing gum and early mobilization)
- I-B : Conventional intervention (early mobilization)
- O-A : Observation of intervention group (Gastrointestinal motility)
- O-B : Observation of the controlled group (Gastrointestinal motility)

Table 2. Frequency Distribution of Respondents by socio-demographic, medical history, type, and indication of Cesarean section in RSKDIA Siti Fatimah Makassar June 2014

Respondent characteristic	Respondents group				Total		p value
	Inter-vention		Control		F	%	
	F	%	F	%			
Age							
20–35	8	40	9	45	17	85	
> 35	2	10	1	1	3	15	
Number (n)	10	50	10	50	20	100	0,324
Education							
SD	1	5	3	15	4	20	
SMP	1	5	3	15	4	20	
SMA	4	20	2	10	6	30	
PT	4	20	2	10	6	30	
Number (n)	10	50	10	50	20	100	0,143
Occupation							
Housewife	6	30	8	40	14	70	
Entrepreneur	3	15	2	10	5	25	
Students	1	5	-	-	1	5	
Number (n)	10	50	10	50	20	100	0,436
Parity							
Primipara	4	20	4	20	8	40	
Multipara	6	30	6	30	12	60	
Number (n)	10	50	10	10	20	100	1,000
Pregnancy Age							
28–40 week	8	40	9	45	17	85	
> 40 week	2	10	1	5	3	15	
Number (n)	10	50	10	50	20	100	0,739
Kind of CS							
SSTP	8	40	9	45	17	85	
SSTP + Kontap	1	5	1	5	2	10	
SSTP + AKDR	1	5	-	-	1	5	
Number (n)	10	50	10	50	20	100	0,684
CS Indication							
Placentae Previa	3	15	4	20	7	35	
CPD	3	15	4	20	7	35	
Pres. Bokong	1	5	1	5	2	10	
Pres. Kaki	1	5	1	5	2	10	
Oligohidramnion	1	5	-	-	1	5	
Gemelli	1	5	-	-	1	5	
Number (n)	10	50	10	50	20	100	0,002*

Source: Primary Data, 2014 \*p value < 0,05

Based on Table 2, In this study, the two groups of the respondents conducted

matching process. This is summarized in the inclusion and exclusion criteria in the previous chapter are: Patients are conscious, willing to become respondents, aged between 20–40 years old, had never done a previous cesarean section, cesarean section with spinal anesthesia type, does not have a history of other abdominal surgery, had no history of gastrointestinal upset from the previous delivery such as a history of perineum rupture level III or IV or a history of Fecal Incontinence, and had no history of other diseases such as Preeclampsia, Diabetes Mellitus, Hypothyroidism, and other muscular and neurological disorders that may affect the interventions. So it can be concluded that the treatment group and the control group were comparable at inclusion criterias.

This research was conducted at the Regional Special Hospital Maternal and Child Siti Fatimah Makassar for one month from May 9<sup>th</sup> until June 13, 2014. The instruments used in this research were observation sheets, socio-demographic questionnaires, checklist sheets and interventions.

The intervention began to perform to both groups after the patient conscious from the influence of anesthesia ( $\pm$  2 hours after surgery, for uniformity of intervention we used 4 hours after surgery) in Recovery Room Regional Special Maternal and Child Siti Fatimah Hospital Makassar. Before being given treatments, prior informed consent explained to the patients about the effect of intervention on recovery of normal gastrointestinal function, prevention of ileus complications and accelerating the patients recovery.

After interventions, patients were given

an observation sheet and asked to record the time of the first flatus. Then the data were collected by the researchers.

## RESULT

The result of the research:

Table 3. Comparison of the Mean Duration of First Flatus Patients Post-Cesarean Section in RSKDIA Siti Fatimah Makassar June 2014

Variable	Duration of the first flatus (Hours)	
	Intervention Group	Control Group
	22,33	32,08
	9,67	24,08
	10,50	31,92
Duration of the first flatus (Hours)	19,33	20,75
	16,25	13,17
	21,42	13,17
	13,00	28,83
	18,00	24,00
	16,00	23,08
	22,83	15,67
Mean	16,933	22,675

Source: Primary Data, 2014

Based on the table 3, it shows that the onset of first flatus in the early mobilization group and chewing gum group with maximum time 22.83 hours with a mean of 16.933 hours. While the onset of first flatus the early mobilization groups a maximum was 32.08 hours with a mean of 22.675 hours group. Based on these result, it can be concluded that there is a mean difference between treatment groups with the control group, where the treatment group 5.74 hours faster than the control group.

Table 4. Independent T-test

Intervention Group	N	Mean	Sig.
Intervention	10	16,9333	,047
Control	10	22,6750	

Source: Primary Data, 2014

Based on the Table 4, statistical test result with Independent T-test obtained P value =  $0.047 < 0.05$ . Due to the P value  $< 0.05$  it then concluded that there are differences between the mean recovery time of gastrointestinal system significantly between the intervention group and control group or the mean recovery time of gastrointestinal system of multimodal intervention group were significantly shorter compared with the control group in patients post cesarean section in RSKD Maternal and Child Siti Fatimah Makassar.

## DISCUSSION

Based on univariate analysis of this research, there is no significant difference between the two groups of respondent regarding to the age, education, occupation, parity, gestational age, and type of cesarean section experienced. It showed that both treatment groups were comparable and has minimal confounding factors so the final result of this research is not influenced by factors such as differences in the demographics, intra operative and post-operative caring process received by the respondents.

In this study, the difference the  $P > 0.05$  was found in the characteristics of respondents by cesarean section indication. It shows that there are significant differences in cesarean

section indications in the treatment group and the control group. However, it would not be a confounding factor for the process of care pre-, intra-, and post-operative that is run equally an elective cesarean section.

In this study, we use a sugar-free gum. Several studies of chewing gum on the duration of the digestive system recovery using sugar-free gum. The past few years, has also been proposed that Hexytol contained in sugar-free gum is likely to have an important role in the amelioration of ileus because it has been known to cause gastrointestinal symptoms such as gas (flatus), bloating, and abdominal cramps in a way depending on its size (Tandeter 2009 in Marwah, 2012).

Characteristics study of 17 randomized controlled trials of chewing gum and gastrointestinal motility by Shan Liin 2013, showed that, there is no standardization of the length of time that is used to chew gum to fasten the recovery of normal gastrointestinal function after abdominal surgery. Chewing time used in previous studies vary according to the consideration of each researchers. In this study, we determined the time of chewing gum to make a schedule of chewing gum that is by chew gum every four hours starting from the first four hours after surgery. This scheduling is done in order to homogenize interventions given to the two groups of respondents.

A research conducted by Farideh M. Ledari (2013) on chewing sugar-free gum to reduce ileuses after cesarean section on nulliparous mothers, also shows that there is no major complications in either group. All patients in the chewing gum group are well tolerated by gum without any complications

and side effects. The study summarized the results that demonstrate the intestinal motility after cesarean section can be enhanced by chewing gum which concludes that this is a useful method, not expensive, and well tolerated by mother after cesarean section.

Based on the number of respondent, this research was In contrast with other studies of chewing gum. in this study the number of respondents amounted to 20 people. With significant numbers of treatment group and the control group by 0,047 <value  $\alpha=0,05$ . Based on data from a related study, the numbers 0,047 on the significance of this research could be more significant by larger sample size and longer research time. Therefore, it is expected to further researchers related with this topic to increase the number of respondents, duration of study, and also the level of accuracy and stringenting the control of confounding factors.

In some related research on chewing gum ever undertaken, such as study by Abd. El Maeboud (2009), Sanjay Marwah (2012), Farideh M Ledari (2012, 2013) rates the return of gastrointestinal function in patients after abdominal surgery are characterized by peristaltic, flatus, defecation, and the feeling of hunger. Whereas in this study, these indicators were not all examined. This is because to assess the gastrointestinal motility requires a good skills and experience. However, due to the lack skill of researchers, peristaltic not be calculated properly so it does not be an indicator of assessment. So does with defecation, patients after cesarean section in RSKDIA Siti Fatimah always given laxatives drugs on the day following the

surgery. This can be a confounding factor so that defecation not become an indicator of assessment in this study. Therefore, recovery indicators of normal gastrointestinal function in this study only assessed by the first flatus in patients. That because the appearance of the first flatus had been able to demonstrate the return of the normal function of the gastrointestinal system.

Chewing gum has been studied for the past ten years as a form of sham feeding to stimulate the process of post-operative bowel recovery. Mechanism of action is estimated to vagal cholinergic (parasympathetic) stimulation of the gastrointestinal tract, which is similar to the oral intake but lower the risk of vomiting and aspiration. In five studies like this to patients who underwent colon resection surgery, chewing gum lowering the time until the first flatus and first bowel movement, even though there was no significant difference in duration of treatment (Quah H Metal 2006, in Ledari FM, 2013).

The core mechanism associated with the relationship between chewing gum with post-operative ileuses is still unclear. One of the most likely explanations is chewing serves as a Sham Feeding, stimulation of intestinal motility, duodenum, and rectum in the human stomach. Other explanation is that chewing can trigger the release of gastrointestinal hormones and increases the secretion of saliva and pancreatic lymph fluid, gastrin, and neurotensin. This indicates that the mechanism is multimodal (more than one mechanism). Nonetheless, for an intervention that is very cheap, effective, and free of side effects, it can be used clinically

although the mechanism behind its success is not yet known, but it is essential for health and economical (Ledari FM, 2013).

Gastrointestinal motility and its relation to the mastication process are described in several reviews. Mortimer Lorber (2000) states that the activity of chewing (mastication) involves not only the teeth but also the periodontal tissue, which consists of two soft tissue, gums and periodontal ligament, and two limestone tissues, tooth cementum and alveolar bone. Jaw movements needed require muscles activities of mastication and the tempuro-mandibular joint. As a result, the process of mastication stimulates intestinal motility such as the increasing of gastric secretion; some parts of the oral structures can also be involved by motoric activity.

Sham feeding has been demonstrated to be one of the methods to increase bowel motility. It causes both vagal stimulation and hormonal release; either one or both could modulate the bowel motility. Sham feeding provides the benefits of gastrointestinal stimulation without the complications associated with feeding. In recent years, the use of gum chewing to reduce ileus has been extensively reviewed in various randomized controlled trials on elective intestinal anastomosis and has been found to be beneficial in reducing post operative ileus. These reviews have concluded that there is consistent benefit for patients from gum chewing after the intestinal surgery in the form of decreased time to first flatus, bowel movements, and postoperative hospital stay. Although the evidence is based on small trials, such a potentially simple and cheap intervention could have important health

and economic benefits (Marwah, 2012).

The fasten recovery of normal gastrointestinal function of mother after cesarean section will very useful in the recovery of patient where oral intake fulfilled so it gives good benefit for the patients. It will lead to the descent of hospital cost and stay.

### CONCLUSION

We can conclude that “there is a significant different of mean time of gastrointestinal recovery between multimodal intervention group “or” the mean time of gastrointestinal recovery in intervention group are significantly lower than the control group” of patients after cesarean section in Siti Fatimah Maternal and children hospital Makassar.

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# RELATIONSHIP BETWEEN MATERNAL SELF-EFFICACY AND MATERNAL FEEDING BEHAVIORS FOR TODDLERS IN JAVA ISLAND, INDONESIA

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## ABSTRACT

**Introduction:** Appropriate maternal feeding behaviors are well known as a health promoting behavior for toddlers because it can support their health and development. According to Pender's Health Promotion Model (2006), self-efficacy can influence the health promoting behaviors. Maternal self-efficacy was the judgment of mothers who have toddlers about their capability to perform appropriate maternal feeding behaviors for their toddlers. This study was aimed to examine the relationship between maternal self-efficacy and maternal feeding behaviors for toddlers in Java Island, Indonesia. **Methods:** A descriptive correlational research design was undertaken in January to February 2015. One hundred and ten Indonesian mothers who have toddlers and lived in Java Island were obtained through multistage random sampling. The research instruments included Maternal Feeding Behaviors Questionnaire (MFBQ), Demographic Characteristic Questionnaire, and Perceived Maternal Feeding Behaviors Self-efficacy Questionnaire (FBSeQ). The bivariate correlation analysis was used to examine the relationship between maternal self-efficacy and maternal feeding behaviors. **Results:** It was found that there was significant positive relationship between maternal self-efficacy and maternal feeding behaviors at .01 levels. The maternal self-efficacy had moderate relationship with maternal feeding behaviors ( $r = .490, p \leq .01$ ). **Discussion:** A nursing intervention to promote appropriate maternal feeding behaviors should deal with the maternal self-efficacy. Nurses should assist and motivate Indonesian mothers of toddlers for having adequate self-efficacy in order to perform better maternal feeding behaviors.

**Keywords:** *Maternal feeding behaviors, maternal self-efficacy, toddler*

# ASSOCIATION BETWEEN MATERNAL PRE-ECLAMPSIA WITH THE PREVALENCE OF LOW BIRTH WEIGHT BABIES (Study at Delivery Room of RA Basoeni General Hospital, Gedeg, Mojokerto)

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## **ABSTRACT**

**Introduction:** Low Birth Weight Babies (LBW) which the worldwide incidence estimated 15 millions baby are major factor of neonatal morbidity and mortality. Where the incidence of pre-eclampsia is associated as one of the cause. The result of pre-eliminary study at RA Basoeni general hospital on December 2014, from 65 treathened babies, 10 babies (15,4%) were born by pre-eclampsia mother, in which 4 babies (40%) were LBW babies and 1 of them was died. The aim of this study was to determine the association between preeclampsia and the prevalence of LBW in RA Basoeni General Hospital Mojokerto at January–May 2015.

**Method:** This study design using correlation analytic with retrospective crosssectional design. The population of this study was Pre-eclampsia maternal in RA Basoeni general hospital's delivery room on January–May 2015. The sampling technique being used was total sampling. Pre-eclampsia was the independent variables and LBW babies was the dependent variable. Instruments used the form of medical record documents. Analysis of statistical tests using the Exact Fisher's test. **Result:** based on the results of the study, 42 pre-eclamptic maternals, most of them were mild Pre-eclampsia (59,5 %) and almost a half were severe pre-eclamsia (40,5%). Almost all of the babies who delivered by Pre-eclampsia maternal were normal weight babies, 35 babies (83,3%) and only a few were LBW babies (16,7%). Association between Pre-eclampsia and LBW babies, analyzed p value = 0,81 >  $\alpha = 0.05$ , that means H1 were rejected. **Discuss:** In conclusion, there was no association between preeclampsia and the prevalence of LBW. So that the midwife should aware about maternal and neonatal complication by doing their work based on the Operational Standard Procedure.

**Keywords:** *maternal, pre eclampsia, low birth weight babies.*



# REPORT ON A CASE CONCERNED WITH EMOTIONAL BEHAVIOUR AND SOCIAL SKILLS

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## ABSTRACT

**Introduction:** This is a case study report of a 3-year old Indonesian boy (Daf) who entered an Australian childcare because the mother has to study abroad. Nurses need to know how issues of different culture and languages affect a young child's development. **Method:** Interview with the mother and carers in the childcare and three observations which conducted once at home and two observations at childcare. **Results:** Daf is very different from home to childcare. Daf appears to be a boy with shy temperament at childcare. His interactions with peers are quite poor. Differently, he was very active and talked active at home. From the three initial mom's concerns of grasping pencil/crayon in writing position (fine motor), attachment issues, and verbal aggression and anger, there are a number of other issues revealed such as poor social skills and a lack of negotiation skills as impact of having hit by a peer at childcare. **Discussion:** Daf is in his transition from a toddler to a preschooler. Daf is transitioning from a mother tongue day care setting to English childcare setting with limited English capacity in new environment, which prevents him from interacting with other native kids. This area is in need to intervene with social skills trainings, including functional verbal expressions in English, for better outcomes.

**Keyword:** *transition, language, non-native, development*

## INTRODUCTION

Daf is 3.1 years old boy from Indonesia. He came to Australia with his mother, who is doing post-graduate course at Flinders University. He speaks Indonesian language at home. Daf has an elder sis, Saf, who is 4 years old going to kindy. Daf's mom is concerned about his emotional behaviors and social skills. The author of this report has gathered information about Daf to better understand the situation and to identify the issues.

## MATERIAL AND METHOD

Information about participant has been gathered through observations, informal interview with mom and informal consulting with teachers.

One appointment was made with mom before observations started. The purpose was to understand mom's concerns in details, reasons for concerns, behaviours and expressions observed by mom, and mom's coping strategies so far. During information gathering process, chatting via text messages with mom has been used. Mom has been very positive and supportive in providing information about Daf.

Since it revealed that Daf has more problems with childcare, two observations at childcare and one at home were scheduled and done. The two observations at childcare are done during free play time both indoor floor play and outdoor play with a range

of different plays preferred by Daf. The observation at home was done using bubbles play at home as per suggestions by Carter (2006). Plays observed are of Daf's preferences and interests, bubbles, sandpit, animals. The observer has either watched Daf playing from distance or got close to him, play with following his lead and asked him questions.

Notes have been typed up right after observations and conversations. The main instrument used to preliminarily assess Daffa is the Developmental ***Checklist Birth to Five [extracted component for 2–4 years old]*** (The Early Childhood Direction Center [adapted by First Look and The Early Childhood Direction Center-Syracuse University], 2006). The Socialization component of the ***Oregon Project for Visually Impaired and Blind Preschool Children - Skills Inventory*** (Brown, Simmons, & Methvin, 1978) is also used. Checklists have been completed following observations and based on notes.

## RESULT

Results are incorporated from two observations checklists and notes, and information gathered from mom and teacher. From the three initial mom's concerns of grasping pencil/crayon in writing position (fine motor), attachment issues, and verbal aggression and anger, there are a number of other issues revealed as follows:

Table 1. Issues

Mom's concerns of attachment and behavioural issue	Daf's anger and his verbal expression
Daf's fine motor development—emerging mature grasp pattern in holding pencil, crayon and scissors	Mom's concern about Daf's gross motor development—walking at 15 months
Daf's crying and issues of reparation with mom	Daf's wetting his bed and being unsettled in childcare
Daf's attending English-speaking childcare as a non-native toddler	Daf's anger and his verbal expressions at anger
Hygiene in Daf's house (having mice)	Daf's poor interactions with peers
Daf was hit by a peer at childcare when getting to play at sandpi, his favourite play	Daf's sleep hygiene and routines

There are a few points to be highlighted about Daf. What comes first is mom's concern of attachment issue. Regardless her worry about attachment, they are bonded and Daf loves his mom. In addition, even when mom was not with Daf for her study, Daf always had a primary care and he was taken good care in his infancy. Above all, the current relationships between mom and Daf is good. Daf is happy being with mom and would like to play with mom.

In addition, Daf is in process of transitioning from a toddler to a preschooler. There are preschooler's skills emerging but Daf much stays as a toddler. He is strong in gross motor but still needs to be exposed to other types of activities such as cycling or playing with ball. His fine motor is quite good but still needs to be strengthened in emerging skills, specifically grasping of pencil, using scissors and buttoning.

Most importantly, Daf is very different from home to childcare. Daf remains an active curious boy with strong gross

motor. However, his communication and conversation exposed in different settings are in vast difference. Daf appears to be a boy with shy temperament at childcare. His interactions with peers are quite poor. Daf does not know how to make simple requests and negotiations in English. Differently, Daf is very active at home. He is talkative. He talks a lot, makes comments and questions. He also negotiates with his sister over toys. He asks and responds to his mom and observer verbally in sentences.

### Reflection and research

#### **Gross motor – walking at 15 months**

According to both the Developmental Checklists Birth to Five (The Early Childhood Direction Center [adapted by First Look and The Early Childhood Direction Center - Syracuse University], 2006) and the Australian Developmental Screening Checklist (ADSC) (Burdon, 1994), it is normal that a toddler walks at between 12–16 months.

**Attachment and behavioural issues**

Regarding mom's concern of attachment and its relations to behavioural issues, Davidson (2013) presents attachment patterns in

infants and parents in different styles and the associations between parents' or caregiver behavior and the child's.

Attachment Style	Characteristic Caregiver Behavior	Characteristic Infant Behavior
Secure	Emotionally available, responsive to infant's emotional and physical needs in a timely, consistent, and effective manner	Seeks proximity to parent, but as mobility develops explores the immediate environment; demonstrate mastery motivation and self-confidence; misses parent on separation, but easily comforted on parent's return
Avoidant	Emotionally unavailable, typically, not adequately responsive infant's communications of need	Avoids parents; emotionally blunted; interacts with objects in the environment rather than with the parent
Resistant or ambivalent	Inconsistently available and responsive to infant's communication of need; caregiving style is determined by parent's moods and is an unpredictable combination of adequate and inadequate responses	Is clingy and preoccupied with the parent; does not actively explore the environment; is difficult to comfort after separation; mood may be angry or passive
Disorganized/disoriented	Highly anxious or threatening toward the child; does not respond effectively or appropriately to infant's communications; may be abuser or psychotic	Is disorganized or disoriented when interacting with the parent; displays approach-avoidance behaviors including staring and "freezing," dinging, or huddling on the floor

Figure 1. Patterns of Attachment in Infant and Parents

Though this is an issue of mom's concern. She seems to be hard to ease her mind when thinking about her availability with her son when he was a baby and infant. However, Daf has been cared even when mom was not home. More importantly, he is now a happy boy at home and he loves his mom. Since the issue is complicated, the author of this report would leave the issue for other program to address. Bearing in mind that mom is an academic, it would be appropriate to recommend mom to read more about this issues for more information.

**Anger and verbal expressions**

A recent longitudinal study conducted by Nozadi et al. (2013) to investigate the associations among maternal sensitivity, children's observed anger reactivity, and expressive language when children were 18 (T1; n = 247) and 30 (T2; n = 216) months, reveals that the association between those factors is significant for boys. However, though it seems to match Daf and mom situation, research also proves that warm, supportive, and sensitive parenting can modify children's emotionality and temperament, reduce

negative emotions such as irritability and anger, negative expressions, and help children to regulate their behaviour (Conway & McDonough, 2006; Spinrad & Stifter, 2002; Feldman, Dollberg, & Nadam, 2011; Van dem Boom, 1994) cited in Nozadi et al. (2013). When children's needs are responded by parents, it reduces the chance for distress and anger in emotionally challenging situations; and it helps children more easily be able to return to "neutral affective states after experiencing stressful situations" (Tarabulsy et al., 2003) cited in (Nozadi et al., 2013).

#### **Examination of reasons for behaviors**

When a behavior happens, it is important to examine the reasons for behavior (O'Brien, 1997). Reflecting Daf's situation to the factors that influence behavior presented by Watling (2013), there are factors influencing his behavior both internally and externally including fatigue–lack of sleep due to change in sleep routines, ineffective communication due to limited English capacity, change in schedule, unfamiliar person and place—from day care to childcare separating from his sister, and Indo kids friends.

<b>INTERNAL FACTORS</b>	
•	Desire for control
•	Fatigue
•	Illness
•	Ineffective communication
•	Pain
•	Poor emotional regulation
•	Poor self-regulation
•	Poor sensory processing
<b>EXTERNAL FACTORS</b>	
•	Task demands greater than skill level
•	Change in schedule
•	Unfamiliar person
•	Unfamiliar place

Figure 2. Factors That Influence Behavior

#### **Problems for non-native toddler at childcare**

Daf situation is very similar to a case study done with a non-native toddler by Wu, Hursh, Walls, Stack Jr, and Lin (2012), who is also with shy temperament and poor interactions with peers in English-childcare setting, though Daf does not really withdraw from play. The interventions used in the study to improve peer interactions across five social skills, greetings, gestures, imitations, offers and accepts, by using verbal instructions, modeling and praise gave positive outcomes. Though the study is single case, the framework theory, Social Skill Training has been widely appraised and applied. Activities adapted from this study are recommended to increase Daf's interactions with peers.

#### **Other concerns**

Daf has recently stopped crying when arriving childcare. He also no longer wets his bed during naptime at childcare. Mom and dad are aware of not using threats to get him to routines. They also try not to compare not lie their children. However, Daf' at childcare is still shy and quiet boy with minimal interactions with peers and still watch other children playing instead of joining them. His English capacity needs to be improved for better interaction with teachers and peers.

#### **Goals and Activities Planning**

The baseline information about Daf shows the bias to words a focus three areas. The first one is to increase Daf's strengths at emerging fine motor skills, which are important for his daily and school functioning. The second one is to improve

Daf's interactions with peers, which is crucial in social competencies development. And the final one is to attempt to help Daf's with anger management, which is important for his later social interpersonal skills and mental health. Goals and activities planning are with considerations over Daf' competencies, his strengths and interests and stretch on Daf's current abilities (Heidemann & Hewitt, 2010).

Table 2. Daf's Hand-Strengthening/Fine Motor

Skills	Goal	Activities
Pencil grasping skills	Daf will be able to grasp pencil in correct writing position well every time he needs or wants to (permanently) by April 2016 (age of 5)	Improving hand skills with hand exercises Improving fingers skills with fingers exercises Please refer to Appendix 4 for exercises
Scissors cutting across the paper	Daf will be able to cut a straight line, staying within ½ inch of the line by 31 <sup>st</sup> December 2015	Learn how to use scissors and how to cut in a line Please refer to Appendix 4 for exercises
Buttoning	Daf will be able to fasten and unfasten large buttons in his coat by October 31 <sup>st</sup> 2014	Activities from (Koscinski, 2012) Please refer to Appendix 4

### **Verbal aggression-anger management**

O'Brien (1997), in explaining why toddlers behave the way they do, asserts that if a child "has an occasional temper tantrum, he or she may be frustrated or not feeling well". The best responses are therefore suggested to "make sure the child is safe and stay nearby" and to "comfort and support the child when he or she is calm".

### **Goals**

Gradually build up Daf's capacity to deal with angry feelings by expressing anger, suppressing anger, and calming anger through his toddlerhood and preschool.

It would take long and would need patience of parents (and Daf) to reach the goal.

### **Activities**

Since Daffa likes stories and animals, stories with animal characters about anger management may attract and help him learn about anger. Parent may give cues to help him reflect on his own anger and to help himself regulate. Parent can read Daf bedtime stories or let Daf watch video about anger management such as the one about the angry octopus or angry bird. Story about angry bird and pigs in at <https://www.youtube.com/watch?v=OSYuWlzl6uw>. Or

stories about tigers, birds and monkey. It is very relevant since Daffa sometimes gets angry with his sister and they often compare and get conflict: <https://www.youtube.com/watch?v=yYM2Ayo1GmQ>.

When Daf gets one or two older, parents and teachers may show him the video about David's anger management. The video can be found at: <https://www.youtube.com/watch?v=hiVBFksp0HM>.

For other strategies of dealing with Daf's anger, please refer to Appendix 5.

**Social initiation-Peer interactions**

There are social skills that promote children participation to be improved to reduce frustration in behavior challenging situations (Watling, 2013).

Observations reveal that Daf is interested in other children's activities and conversation. He needs encouragement, assistance and

training to improve interactions with peers. Daf's peer interactions are prioritized with greetings and simple requests to join play with other children and and simple request for help from teacher.

- Communicating wants, desires, dislikes
- Compliance with requests
- Cooperation with adults and peers
- Flexibility
- Giving an object on request
- Independent play:
  - Ability to initiate
  - Ability to sustain
  - Ability to conclude
- Making choices
- Parallel play
- Social play
- Variety in play
- Sharing
- Turn taking
- Waiting

Figure 3. Skills That Promote Social Participation

Table 3. Strategies and activities are adapted from study conducted by Wu et al. (2012)

Goals	Methods	Activities
Daf will be able to greet and respond to greetings to teachers and peers in three different ways by 30 <sup>th</sup> October 2014.	Instructions Tell Daf what to do and how to say in English.	Introduce behaviors at home Parents teach Daf different expressions for different purposes at home: Greet and respond to greetings in English in three different ways.
Daf will be able to make simple request to join a peer in 2 different ways by 30 <sup>th</sup> October 2014.	Modeling Showing Daf what to say and how to say in English by parent's actions.	Say simple request to join play with other children and request for help with teacher in two different ways. Model the behavior Showing Daf by doing
Daf will take imitative to request to join play with other children by 30 November 2014.	Positive reinforcement. Give Daf praises to prompt Fading: Decreasing rates of instructions, modeling and praise.	Demonstrating the situations and what to say in English Practice behavior at home Asking Daf to practice using those expressions at home Reminding Daf to use those expressions whenever appropriate

### **Consideration for intervention by teacher(s)—Access to favourite play**

At childcare, Daf is keep on playing in the sandpit. However, a peer who loves playing in the sandpit as well often hits Daf in anger. Daf was afraid when being hit by that boy. He did not fight back but chose to play other games. This issue should be addressed at childcare so that Daf can enjoy his favourite games instead of hanging around and watching other children playing.

According to O'Brien (1997), if a child "frequently hits, kicks, pushes, pinches, pulls hair, or bites in anger especially toward one particular child, he or she may be developing a hostile and antisocial approach to others". In this case, she recommends that teacher may:

1. *Stop aggression and separate the child,*
2. *Increase supervision and keep the child apart as much as possible,*
3. *Intervene to prevent aggression whenever possible,*
4. *Keep track of the child's behavior,*
5. *Increase efforts to involve the aggressive child in play and teach appropriate social behavior through positive attention and affection.*

### **CONCLUSION**

Daf is in his transition from a toddler to a preschooler with his mom's concerns about his emotional behavior and social skills, especially in childcare. Regardless mom's concern about attachment in early infancy and behavior issues, Daf is generally an active and nice boy with great love for his mom. He exposed emotionally appropriate in free play (bubbles). There are three

areas recommended for interventions, his anger, emerging fine motor skills and peer interactions. His anger has been examined for reasons and antecedents. His anger is the first area to be recommended for management using strategies and activities using his interests. Regarding motor area, he is strong in gross motor though some of his emerging fine motor skills need strengthening. Another main issue with Daf is transitioning from a mother tongue day care setting with sister and friends of nationality, and that he is a nonnative child at English childcare setting with limited English capacity in new environment, which prevents him from interacting with other native kids. This area is in need to intervene with social skills trainings, including functional verbal expressions in English, for better outcomes. Goals developed for three areas are long term and need parents strong commitment and patience to go along with Daf. When Daf transits from toddler house to preschoolers' or from preschoolers' to school, transitions need to be careful prepared and addressed for better inclusion outcomes.

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# THE FACTORS AFFECTING THE SUCCESSFUL IMPLEMENTATION OF PROGRAM CHILDBIRTH PLANNING AND PREVENTION OF COMPLICATIONS (PCPPC) IN REDUCING MATERNAL MORTALITY IN WORKING AREA OF JOMBANG CLINIC

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## ABSTRACT

**Introduction:** This research was aimed to describing the implementation of PCPPC in working area of Jombang Society Health Center (Clinic); describing the attained success and the factor affecting the successful implementation of PCPPC in reducing maternal mortality in working area of Jombang Clinic; describing the existing obstacles in IPCPPC in working area of Jombang Clinic. **Method:** A qualitative descriptive research by using data collection techniques such as deep interviews, observation and documentation. The informants were the head of clinic, region midwives, PCPPC cadres, pregnant women, their husband or families, and community leaders in the working area of Jombang clinic. Data analysis technique was interactive analysis covering data collection, data display, data reduction and drawing conclusions or verification. **Results:** Percentage of pregnant women who received antenatal care according to the standart was 92%, percentage of pregnancy and parturition of 20 complications cases the 20 cases were 100% handled quickly and adequately, percentage of childbirth that got maternity care in the health workers was 100%, Percentage of using Family Planning method after childbirth was 75%. **Discussion:** This study indicated that although there were some obstacles the successful of IPCPPC in the working area of Jombang society health center ran well.

**Keywords:** *program childbirth planning and prevention of complications (PCPPC) , PCPPC cadres, health monitoring*

# EFFECT OF PLAY WITH COLORING WITH DECREASING MALADAPTIVE BEHAVIOR SCORE OF PRE SCHOOL CHILDREN AGED 3–5 YEARS WHICH EXPERIENCE HOSPITALIZATION IN HOSPITAL OF KEDIRI DISTRICT

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## **ABSTRACT**

**Introduction:** Play with coloring is an activity that aims to eliminate the tension and have fun at the children who experienced hospitalization by providing intervention in the form of streaks of color in the figure. Giving this intervention will provide a relaxing effect on the body and can provide emotional stimuli in the limbic system, resulting in maladaptive behavior control in the hypothalamus. Accordingly, this study aimed to determine the effect of art therapy to decrease maladaptive behavior score of pre-school children (3–5 years) during the hospitalization. **Method:** The study design used is an experimental design approach to pretest posttest with control group who provide treatment to art therapy in the treatment group, whereas the control group get a standard intervention from the hospital. Respondents in the study were aged 3–5 years amounted to 20 respondents were divided into two treatment groups and the control group. From the description, it can be seen that the independent variables in this study are art therapy, while the dependent variable is maladaptive behaviors. To obtain the data in this study used a questionnaire which was analyzed using Paired t-test and Independent t tests. **Results:** Based on Paired t-test p value = 0.000 is obtained which indicates that  $H_1$  is accepted. Meanwhile, the Independent t test P values obtained test p = 0.032 which indicates a different result. This indicates that there are significant art therapy to decrease maladaptive behaviors score of pre schoolers (3–5 years) who experienced hospitalization in Kediri Hospital. From these results, it is suggested that pediatric nurses and parents provide interventions art therapy routine for hospitalized children, in order to minimize the child's maladaptive behavior.

**Keywords:** *play with coloring, maladaptive behavior score, children aged 3–5 years old*

## INTRODUCTION

The number of children hospitalized according to Wong (2001) in Lumiu (2013), has increased. Percentage of children treated in the hospital today became a problem more serious and complex more than some years ago. Mc Cherty and Kozak said nearly four million under one year children experience hospitalization (Lawrence J., in Lumiu, 2013). Hospitalization itself is a process for a reason the plan or emergency, requiring the child to stay in the hospital, undergoing therapy and care until their return back home. During this process, the child and parents can experience a variety of events which, according to some studies indicated a very traumatic experience and filled with anxiety (Supartini, 2004, in Haryani 2012).

In Indonesia, the number of preschool age children (3–5 years old) based on National Social Economic Survey (SUSENAS) for 2001 amounted to 72% of the total Indonesian population, estimated at 35 per 100 children undergoing hospitalization (Sumaryoko, in Purwandari, 2010). In relation to this, child morbidity in Indonesia based on the National Social Economic Survey (SUSENAS) 2001–2005 also mentions that in 2005 the morbidity of children aged 0–4 years was 25.84%, 5–12 years of age as much as 14.91%, aged 13–15 years 9.1%, 16–21 years of age was 8.13% (NSES, 2005; in Navianti, 2011). Isle of Wight study reported by Bernstein and Garfinkel showed 60% of children experiencing anxiety disorders, primarily because of divorces anxiety disorder, and 50% suffer from depression (Bolin 2011).

Preschoolers will show maladaptive behaviors when adapting to hospitalization

that happened, this is because the child feels afraid that part of his body would change as a result of injury or actions performed on the child (Hegner, 2003). In the preschool years, maladaptive behaviors that occur in the child's hospitalization is refusing to eat, often asked, slowly crying, uncooperative toward nurse so that hospitalization becomes lost control and restriction of activity (Jovan 2007; in Rahma 2008).

Maladaptive behavior has a detrimental impact on individuals and society. Based on the concept of psychoneuroimmunology, the hypothalamic pituitary adrenal axis, said that maladaptive behavior can lead to hospitalization of children with anxiety. If the anxiety experienced by patients is very high, then the adrenal glands to produce cortisol in large quantities so that it can suppress the immune system (Clancy, 1998; in Nursalam, 2005). The presence of immune suppression is what will lead to longer treatment time, as well as accelerate the occurrence of complications during treatment.

Related with that, it is important to know the tasks or stages of child development, in order to provide treatment without causing fear or trauma. In addition nurses must also have the knowledge and skills of how to approach a child, and interact with them so that the child is cooperative to the treatment given (Adriana, 2011). Effective media solve maladaptive behavior in children when hospitalization is playing. Therefore, the provision of play activities for children in the hospital will provide therapeutic value that can affect in the release of tension in children (Wong, 2003).

Playing with coloring (art therapy)

is an alternative nursing interventions to minimize reaction appears hospitalization in children. The intervention was also one of the therapeutic modalities in the field of nursing in which nurses base patient's potential as a starting point for the process of healing (Keegan, 2001, in Purwandari 2009).

Based on the above phenomenon, the researchers were interested in conducting research on the effects of playing with coloring to decrease maladaptive behavior score preschool children (3–5 years) who experienced a hospitalization in Hospital of Kediri District.

## METHODS

The design of this study used quasi experimental with pretest-posttest approach with control group. Sampling technique used purposive sampling. In this study used a sample of preschool children (3–5 years) who experienced a hospitalization in Hospital of Kediri District consisting of 20 respondents, 10 respondents from the treatment group and the control group of 10 respondents who had met the inclusion criteria. The inclusion criteria were included in this study is the first children hospitalized during the vulnerable period of 3–7 days, acutely ill child, the child is still in a condition to perform daily activities but need a little help from health professionals, willing to be a respondent, the approval of a parent intervention to follow from beginning to end. This research was conducted at the Hospital of Kediri District, precisely in HVA Toeloengredjo Hospital and Amelia Pare Pare Hospital, on February 11 to February 22, 2014.

Choosing the sample done at the same time in both of the Hospital at Kediri District. In choosing sample was accompanied by a nurse researcher in determining the child's room is allowed to follow the intervention play with coloring based on the child's health status. After choosing sample, then the grouping into two groups: control groups and treatment group. Treatment group play with coloring done for 3 days each at 10.00 AM. If respondent not following the play intervention with coloring from the beginning to the end so they will be dropped out of the study.

Previous researchers explain about informed consent, the contract time, and pretest questionnaire both in the control group and the treatment group. After data collection is complete, researchers provide interventions play with coloring to the treatment group and the control group with the intervention of the standard from hospital. After 3 days researchers conducted questionnaires posttest in the treatment group and the control group. At the end of the study, researchers gave interventions play with coloring using the same method and accompanied by a parent respondents. It is intended that the principles of justice in both groups of study subjects still consistent.

## RESULTS

This following will be presented the results of research on the effect of playing with coloring with decreasing maladaptive behavior score preschool children (3–5 years) in Hospital of Kediri District.

### a. Description of Respondent's Age

Table 1. Characteristic of Respondent based on Age of Treatment Group

Age interval	Treatment	Control	N	(%)
3 Years	5	7	12	60%
4 Years	1	1	2	10%
5 Years	4	2	6	30%
Total	10	10	20	100%

Table 1 shows that the respondent in the treatment group and the control group obtained, children aged 3 years were 12 respondents (60%), children aged 4 years by 2 respondents (10%), and 5 year olds as many as 6 respondents (30%). Based on data from these studies it can be concluded that, most respondents was 3 years old.

As stages of growth and development, children at that age still have unstable health conditions, easy getting disease, the age of the child is also looked a sickness as punishment (Muscarì, 2005).

### b. Description of Respondent's Gender

Table 2. Distribution of Characteristics of Respondents based on Gender

Gender	Treatment	Control	N	(%)
Male	7	5	12	60%
Female	3	5	8	40%
Total	10	10	20	100%

Table 2 shows that in the treatment group and control group obtained 12 respondents (60%) male gender and 8 respondents (40%) were female. Based on these data, it can be concluded that the

respondents with male gender more often getting sick. Characteristic male generally prefer to play outside rather than inside the house so it is more susceptible of getting the disease.

### c. Description of Accompany Family

Table 3. Distribution of Characteristics of Respondent based on Accompany Family

Accompany Family	Treatment	Control	N	(%)
Parents	8	9	17	85%
Another family	2	1	3	15%
Total	10	10	20	100%

Table 3 shows that in the treatment group and the control group obtained 17 respondents (85%) accompanied by his parents (mom) when sick, and 3 respondents (15%) accompanied by other family members when sick. Based on the data obtained can be concluded that the presence of the parents (mothers) during the hospital has an important role in improving children's coping during adaptation to the hospital environment (Schiff, 2001).

### d. Description of Health Status

Table 4. Distribution of Characteristics of Respondents based on Health Status

Health Status	N	(%)
Febrile convulsions	8	40%
Fracture	2	10%
Gastroenteritis	2	10%
ARI	3	15%
Tonsillitis	2	10%
Faringitis	1	5%
Dengue	1	5%

Asthma	1	5%
Total	20	100%

Table 4 shows that in the treatment group and the control group obtained 8 respondents (40%) with febrile convulsions medical diagnosis, 2 respondents (10%) with a medical diagnosis of fracture, 2 respondents (10%) with a medical diagnosis of gastroenteritis, 3 respondents (15%) with a medical diagnosis of ARI, 2 respondents (10%) with medical diagnoses tonsillitis, 1 respondent (5%) with a medical diagnosis of pharyngitis, 1 respondent (5%) with a medical diagnosis of dengue fever, and 1 respondent (5%) with other diagnoses medical asthma.

Based on these data, it can be concluded that, at most children treated with a medical diagnosis of febrile convulsions. At this age the immune system of preschool children begin to develop, but the high contact the child with new friend is also possible the child vulnerable to infectious diseases at preschool age (Ngastiah, 2005).

#### e. Data Description of Pretest and Posttest of Scores on Maladaptive Behavior in Treatment Group

**Table 5.** Data Distribution of Pretest dan Posttest in Treatment Group

Treatment	Mean	Minimum	Maximum	Std. Deviation
Pretest	58.10	40.00	75.00	1.16
Posttest	26.70	13.00	35.00	6.49

Table 5 shows the results that the average score on the pretest measure maladaptive behavioral intervention children who were

playing with the coloring was 58.10 with a standard deviation (SD) 1.16, the lowest value is 40 and the highest score is 75. While the value of the posttest measure maladaptive child behavior given intervention play with coloring obtained an average 26.70 with a standard deviation (SD) 6.49, the lowest value is 13 and the highest score was 35.

#### f. Data Description of Pretest and Posttest of Scores on Maladaptive Behavior in Control Group

**Table 6.** Data Distribution of Pretest dan Posttest in Control Group

Control	Mean	Min	Max	Std. Dev.
Pretest	56.30	40.00	79.00	1.18
Posttest	55.20	40.00	77.00	1.20

Table 6 shows that in the control group gained an average pretest scores on measures of maladaptive behavior without intervention children playing with coloring is 56.30 with a standard deviation (SD) 1.18, the lowest value is 40 and the highest score is 79. While the value of the measurement posttest scores maladaptive behavior without intervention children play with the coloring obtained an average of 55.20 with a standard deviation (SD) 1.20, the lowest value is 40 and the highest score was 77.

#### g. Results of Normality Test

The test results from the test of normality Shapiro-Wilk with level of 95% was obtained score  $P > 0,05$ . It can be concluded that the distribution of the data before and after treatment is normal, so for the next statistical tests can use T-test.

### h. Result of Homogeneity Test

Results of homogeneity test of homogeneity of variance with confidence level of 95%, the result score of  $P > 0,05$  ( $0.889 > 0.05$ ) for variable control group and the treatment group. It can be concluded that the distribution in both of the data are homogeneous.

### Data Analysis

Processing of the data in this study using Paired t-test and Independent t-test with SPSS (Statistical Product and Service Solution) 16 for Windows. Based on test Paired t-test showed that the significant value (P) Asymp. Sig. (2-tailed) in the treatment group was 0.000. This shows that  $H_0$  is rejected so playing with coloring can decrease behavior score maladaptive preschool child (3–5 years) who experienced hospitalization significantly.

In relations with this, the results of statistical tests Independent t-test is known that the value of significance (P) Asymp. Sig (2-tailed) is 0.022, score  $P < \alpha$  ( $0.000 < 0.05$ ), indicating that  $H_0$  refused and  $H_1$  accepted. This shows that play with the coloring can reduce maladaptive behavior score preschool children (3–5 years) who experienced hospitalization.

## DISCUSSION

### a. Maladaptive Behavior Scores Before and After Child is Given Intervention in the Treatment Group

The results of two studies conducted in Hospital of Kediri District, which is in the Amelia Pare Hospital and HVA Toeloengredjo Pare in the treatment group showed a difference in pretest and posttest values,

after is given intervention play with coloring, this is evidenced by the results of statistical tests Paired t-test showed significance  $0.000 < \alpha$  with a confidence level of 95%.

The results obtained in this study is fitted with the theory Deslidel et al (2011) which states that by doing the game while in a children's hospital will be decrease the tension and stress they experienced, because by doing these activities children can divert the pain and bring relaxation through pleasure when playing the game. In addition, the statement of Suparto (2003) in Sujatmiko (2013) also supports the results of this study, stated that play with coloring can also provide opportunities for children to free expression and can function as a healer game, so it automatically negative child behavior can also be reduced. With coloring activity can provide a sense of pleasure in children although still undergoing treatment at the hospital, because basically preschool children (3–5 years old) is a very active child and imaginative.

### b. Maladaptive Behavior Scores Before and After Child is Given Intervention in the Control Group

The results of two studies conducted in Hospital of Kediri District, which is in the Amelia Pare Pare Hospital and Toeloengredjo HVA Hospital in the control group showed that there were only two respondents who experienced the difference in pretest and posttest, while other respondents did not show any difference in pretest and posttest. This is evidenced by the results of statistical tests. Paired t-test showed significance  $0.120 > \alpha$  with a confidence level of 95%,



which means the provision of a standard intervention without additional intervention hospital play with coloring is no differences in pretest and posttest values significantly in preschool-aged children who experience of hospitalization.

The results of the study are consistent with the findings presented by Rudolph (2002) in Sukoati (2012) which said that, in the early stages of a child entering the hospital environment still need to adapt to the disease, as well as new and unfamiliar environment to undergo routine activities with hospital staff and the people around him. Children will also experience fear and pain because of disease or treatment measures undertaken during treatment. That's what causes children have maladaptive behaviors that tend to be high at the beginning of children admitted to hospital than after a given intervention from the hospital.

No difference in pretest and posttest scores in the control group, based on a statement proposed by Wong (2009) stated that the additional stimulation which can make the child distracted from the pain, and the child does not feel pleasure while in the hospital can make a child feel the same thing while in the hospital, so the child maladaptive behaviors tend to score the same or slightly decreased. With the provision of play activities for children in the hospital will provide therapeutic value and important in the release of tension, so it can handle his maladaptive behavior of children during hospitalization.

### **c. Analysis of the Effects of Play with Coloring with Decreasing**

### **Maladaptive Behavior Scores in Treatment Group and Control Group**

The results of two studies conducted in Hospital of Kediri District is in Amelia Pare Pare Hospital and Toeloengredjo HVA Hospital, shows differences in pretest and posttest values significantly in the treatment group, compared with pretest and posttest values in the control group. This is evidenced by the results of statistical tests Independent t-tests comparing the difference in pretest-posttest results in the control group and the treatment group showed significance  $0.000 < \alpha$ , which means there are significant differences between maladaptive behavior of children in both groups after a given intervention.

The difference in the scores of pretest and posttest control group and the treatment group, according to the theory put forward by Adriana (2011) which stated that, play with coloring can assist the child care without causing fear or trauma to the child, and in accordance with the stages of child development preschool age and do not require strenuous physical activity. Through a child coloring activity under conditions of stress and anxiety can be relaxed so that the child's negative behavior can also be controlled.

The process of implementation of interventions play with coloring can make children trying to concentrate and focus to color pictorial paper, although many other activities going on around them. This shows that through the intervention children playing coloring then attention will be distracted, so that tension of child will be reduced. On

the condition of the body relaxes, the body will release the hormone endorphin which are soothing, giving effect to emotional stimuli in the limbic system, resulting in the hypothalamic control of maladaptive behaviors that can lead to feelings of pleasure and well-being (Rudiansyah 2008, in Purwandari, 2009).

Based on the explaining and supported theories that appropriate interventions can be said that play with coloring can reduce maladaptive behavior score preschool children (3–5 years) who experienced a hospitalization in Hospital of Kediri District.

### **Limitations of Research**

Limitations faced by researchers when conducting intervention process is played by coloring the child has limited mobility because of illness they experienced, so it can not carry out the coloring process fully. Moreover, the unavailability of a convenient place in the children's hospital requires using makeshift base for the implementation of interventions to play with coloring. It can be a barrier to maximize the implementation of children's coloring process.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

Based on the results of research and discussion can be concluded that, before intervention given to play with coloring all respondents in the treatment group and the control group showed higher scores for maladaptive behavior suffered hospitalization. After giving a playing with coloring intervention in the treatment

group, the total respondents obtained decreasing a score of behavior maladaptif. While in the control group were given a standard intervention from the hospital only 3 respondents obtained scores decreased maladaptive behavior.

### **Recommendations**

#### **For Nursing**

To develop the potential of pediatric nurse practitioners in nursing, as well as enhancing the knowledge and skills of nurses in approaching and interacting with children so that children are not afraid and feel pressure when visited by a nurse.

#### **For Institutions**

To help lower scores on the maladaptive behavior of preschool children required facilities and pleasant environment so as to make the child feel safe and comfortable. This can be done for example by providing facilities coloring game tools, colorful rooms, as well as the spatial arrangement children can distract children against illness.

#### **For Parents**

In this game, parents can play a role in providing support and motivation for children to be able to adapt optimally while undergoing treatment at the hospital.

#### **For Further Research**

Further research needs to be done about playing with the coloring of the indicator more specific maladaptive behaviors such as sleep disturbance, deterioration of growth and development, increased dependency, etc.

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# AN INTERNATIONAL COLLABORATIVE PROJECT ON EMPOWERING INDONESIAN WOMEN: LESSONS LEARNT SO FAR

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## **ABSTRACT**

**Introduction:** Maternal and child health issues are a significant concern in Indonesia (United Nations 2014). This includes access and quality of healthcare service provision. These are key factors in the improvement of health indicators, but improving these factors must be considered alongside improving understanding of health needs (World Vision 2008, Lassi, Haider et al. 2010). Community based interventions have been enshrined as key approaches to improving healthcare with participation seen as a necessary ingredient to any sustainable improvement in health (Rosato, Laverack et al. 2008, World Health Organisation 2010). Empowering women with understanding and confidence to take a path of action is seen as a way that will improve their health practices (Thomsen, Hoa et al. 2011). A collaborative project has commenced to identify the specific health needs of women and children living in Kenjeran, Indonesia so that future intervention projects address the specific needs of this population. **Method:** A nursing and midwifery research team at Flinders University Australia and nursing researchers at Universitas Airlangga commenced an ethically approved needs analysis project in 2014. This has involved examining statistical data, health records and conducting focus groups and individual interviews. **Results:** The qualitative data is currently being thematically analysed using NVIVO. **Discussion:** This paper will present the project to date and lessons learnt in the process. Differences in systems of research, culture, language, working in large research teams and obstacles encounter will be discussed with the aim of assisting others considering international collaborative research.

**Keywords:** *women's health, collaborative research, empowering women in Indonesia*

# MOTHER'S BEHAVIOR IN THE FULFILLMENT OF NUTRITION FOR UNDERWEIGHT TODDLER BASED ON HEALTH PROMOTION MODEL

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## ABSTRACT

**Introduction:** Toddler still depends on their mother to fulfil their nutrition. Mother's behavior has effect on toddler's nutritional status, especially for underweight toddlers. There are several factors which influence mother's behavior in the fulfillment of nutrition for underweight toddler. The aim of this study was to analyze factors which related to mother's behavior in the fulfillment of nutrition for underweight toddler based on Health Promotion Model (HPM). **Method:** This was correlational research with cross-sectional approach. Populations were mothers with underweight toddler who lives at Kecamatan Kenjeran, Surabaya, East Java. Sample size was 32 respondents taken with purposive sampling. The independent variables were mother's prior related behavior, perceived benefit, perceived barrier, perceived self-efficacy, and activity related affect, while the dependent variable was mother's behavior in the fulfillment of nutrition for underweight toddler. Data were collected by using questionnaires, and analyzed by using Spearman Rho with level of significant  $\alpha \leq 0.05$ . **Result:** The results showed that mother's prior behavior ( $p = 0.003$ ;  $r = 0.510$ ), perceived benefit ( $p = 0.005$ ;  $r = -0.486$ ), perceived barrier ( $p = 0.002$ ;  $r = 0.527$ ), perceived self-efficacy ( $p = 0.004$ ;  $r = 0.497$ ), and activity related affect ( $p = 0.005$ ;  $r = 0,486$ ) correlate with mother's behavior in the fulfillment of nutrition for underweight toddler. Mother's perception on barrier have the strongest correlation at all. **Discussion:** Mother's prior related behavior, perceived benefit, perceived barrier, perceived self-efficacy, and activity related affect have significant correlation with mother's behavior in the fulfillment of nutrition for underweight toddler. Nurses should do health promotion frequently to improve mother's behavior in meeting the nutritional needs of underweight toddler, especially to minimize the perception of mother against obstacles. Further research should investigate the other factors which correlate with mother's behavior in the fulfillment of nutrition for underweight toddler based on HPM.

**Keywords:** *mother's behavior, the fulfillment of nutrition, underweight toddler, HPM*

## INTRODUCTION

Malnutrition still become a serious health problem in Indonesia, especially on toddler (Siswono, 2008). Toddler at risk of malnutrition because at this age, they need a lot of nutrition for growth and development processes. WHO's report (2010) stated that approximately 1,5million/years toddlers died because of improper feeding, 90% of it noted on developing countries.

The prevalence of underweight toddler still high in Indonesia. If it isn't handled properly, they will become malnourished toddler (Kemenkes RI, 2010). Based on Riskesdas (2013), the prevalence of underweight children in Indonesia was 19,6% and keep increasing year by year. In 2010 was 17.7%, and in 2011 was 17.9% (Kemenkes RI, 2014).

Toddler's nutritional status depends on their daily intake. Parents play an important role in meeting the nutritional needs of toddler. Toddler needs help to choose and manage their diet. In many families, mother is responsible to provide food for other family members, especially to their children. Mother's behavior effect on toddler's nutritional status (Virani, 2011).

Research conducted by Rinda (2009), showed only 62,5% mother who can give nutrition to their toddler with properly, only 75% mother who have positive attitude on nutrition, and 54.2% mother who only know that toddler should eat nutritius diet, but they didn't practice it.

Many factors affect mother's behavior in the fulfillment of nutrition for underweight toddler. Pender (2011), explained that there are several factors that affect a person's

behavior in order to optimize their health status through HPM. HPM classifies the determinants of individual behavior into three groups of specific propositions, that is: 1) individual characteristic and experience; 2) behavior specific cognition and affect; and 3) interpersonal/situational factors. HPM can be used to determine factors which related to mother's behavior in the fulfillment of nutrition for underweight toddler.

The aim of this research was to analyze mother's behavior in the fulfillment of nutrition for underweight toddler. Researcher had examined the correlation between mother's prior related behavior (individual experience), perceived benefit, perceived barrier, perceived self-efficacy, activity related affect (behavior specific cognition and affect) and mother's behavior in the fulfillment of nutrition for underweight toddler. Research findings can be used to arrange health promotion program for mother with underweight toddler, so that their behavior in the fulfillment of nutrition for underweight toddler will be improving, and the nutritional status of their toddler were expected to be normal.

## METHOD

This was correlational research with cross sectional approach. Populations were mothers with underweight toddler who lives at Kecamatan Kenjeran, Surabaya, East Java. Sample size was 32 respondents taken with purposive sampling. Respondents should meet this criteria: 1) live together with her underweight toddler; 2) care independently (without help from baby sitter or grandmother/grandpa); 3) can read and write well. Respondents were excluded

from research if their underweight toddler have complication (such as tuberculosis, congenital heart disease, etc) or refuse to join the research.

The independent variables in this research were mother's prior related behavior, perceived benefit, perceived barrier, perceived self-efficacy, and activity related affect, while the dependent variable was mother's behavior in the fulfillment of nutrition for underweight toddler. Data were collected by using questionnaires and food recall 24 hours. Data were then analyzed by using Spearman Rho with level of significant  $\alpha \leq 0.05$ .

## RESULTS

Demographic distribution had showed that 22 (72%) respondents were 17–25 years old. Almost all were household mother, 28 (84%) respondents. Their last education were

high school, 14 (46%) respondents. And their family's incomes around 1.000.000–1.700.000 IDR/month, 15 (45%) respondents.

Cross tabulation showed that respondents mainly have negative prior related behavior and not good behavior in the fulfillment of nutrition for underweight toddler, was 21 (65.6%) respondents. While respondents with negative prior related behavior, but have good behavior in fulfilling the nutrition of their underweight children, was 5 (15.6%) respondents. Statistical tested with Spearman rho showed  $p = 0.003$  and  $r = 0.510$ . It means, prior related behavior have strong positive relation with respondents behavior in fulfilling the nutrition of their underweight toddlers. See table 1.

Table 1 The relationship between prior related behavior and behavior in fulfilling the nutrition of underweight toddler

Prior related behavior	Mother's behavior		Total
	Good	Not Good	
Positive	5 15,6%	4 12,5%	9 28,1%
Negative	2 6,3%	21 65,6%	23 71,9%
Total	7 21,9%	25 78,1%	32 100%

*Spearman's rho p = 0.003 r = 0.510*

Result had showed that most respondents have negative perceived benefit and not good behavior in fulfilling the nutrition of underweight toddlers, 13 (40.6%) respondents. While respondents with positive perceived benefit and good behavior in fulfilling the nutrition of underweight

toddlers, 7 (21.9%) respondents. Statistical tested with Spearman rho showed  $p = 0.005$  and  $r = -0,486$ . It means, perceived benefit have enough negative relation with respondents behavior in fulfilling the nutrition of their underweight children. See table 2.

Table 2 The relationship between perceived benefit and behavior in fulfilling the nutrition of underweight toddler

Perceived benefit	Mother's behavior		Total
	Good	Not Good	
Positive	7 21.9%	12 37.5%	19 59.4%
Negative	0 0.0%	13 40.6%	13 40.6%
Total	7 21.9%	25 78.1%	32 100%

*Spearman's rho p = 0.005 r = -0.486*

Result had showed that almost all respondents perceived a barrier and have not good behavior in fulfilling the nutrition of underweight toddlers, 19 (59.4%) respondents. While respondents which didn't perceived a barrier and good behavior in fulfilling the nutrition of underweight

toddlers, 6 (18.8%) respondents. Statistical tested with Spearman rho showed  $p = 0.002$  and  $r = 0.527$ . It means, perceived barrier have strong positive relation with respondents behavior in fulfilling the nutrition of their underweight toddlers. See table 3.

Table 3 The relationship between perceived barrier and behavior in fulfilling the nutrition of underweight toddler

Perceived barrier	Mother's behavior		Total
	Good	Not Good	
Barrier	1 3,1%	19 59,4%	20 62.5%
No Barrier	6 18,8%	6 18,8%	12 37,5%
Total	7 21,9%	25 78,1%	32 100%

*Spearman's rho p = 0,002 r = 0,527*

Table 4 had showed that many respondents perceived weak self-efficacy and have not good behavior in fulfilling the nutrition of underweight toddlers, 15 (46.9%) respondents. While respondents which perceived strong self-efficacy and have good behavior in fulfilling the nutrition

of underweight toddlers, was 7 (21.9%) respondents. Statistical tested with Spearman rho showed  $p = 0.004$  and  $r = 0.497$ . It means, perceived self-efficacy have enough positive relation with respondents behavior in fulfilling the nutrition of their underweight toddlers.



Table 4 The relationship between perceived self-efficacy and behavior in fulfilling the nutrition of underweight toddler

Perceived self-efficacy	Mother's behavior		Total
	Good	Not Good	
Weak	0 0,0%	15 46,9%	15 46,9%
Strong	7 21,9%	10 31,3%	17 53,1%
Total	7 21,9%	25 78,1%	32 100%

*Spearman's rho p=0,004; r = 0,497*

Table 5 had showed that more than a half of respondents have negative activity related affect and have not good behavior in fulfilling the nutrition of underweight toddlers, 18 (56.3%) respondents. While respondents which have positive activity related affect and have good behavior in fulfilling the nutrition of underweight toddlers, was 6 (18.8%) respondents. Statistical tested with Spearman rho showed  $p = 0.005$  and  $r = 0.486$ . It means, activity related affect have enough positive relation with respondents behavior in fulfilling the nutrition of their underweight toddlers.

Table 5 The relationship between activity related affect and behavior in fulfilling the nutrition of underweight toddler

Activity related affect	Mother's behavior		Total
	Good	Not Good	
Negative	1 3.1%	18 56.3%	19 59.4%
Positive	6 18.8%	7 21.9%	13 40.6%
Total	7 21.9%	25 78.1%	32 100%

*Spearman's rho p.= 0.005; r.= 0.486*

## DISCUSSION

Prior related behavior correlate with mother's behavior in fulfilling the nutrition of their underweight toddlers. It has strong positive correlation. It means positive prior related behavior can lead to good behavior in fulfilling the nutrition of their underweight

toddlers. Pender (2011) explain experiences were innate factors, which effect future behavior. This factors can't be modified. Most respondents have negative perceived benefit and not good behavior in fulfilling the nutrition of underweight toddlers. Demographic distribution had showed that

almost all respondents were 17–25 years old. Age related with one's experience. Young mother was likely to have limited experiences in fulfilling the nutrition of their underweight toddlers, such as how to choose healthy menu, how to produce healthy meal, etc.

Perceived benefit have negative correlation with mother's behavior in fulfilling the nutrition of their underweight toddlers. Almost respondents have a positive perception and strongly agree if nutritious food was needed to help children reach their normal body weight, grow bigger, and healthier. Perceived benefit of action were positive perception or consequences to perform certain health behaviors (Pender, 2011). One's perception can be influenced by their knowledge. The benefit of nutrition for human body was informed clearly since kindergarden. Most respondents graduated from high school. Puskesmas also has been done health education for mother's with underweight toddlers periodically through posyandu. So that, mother's have positive perceived benefit about nutrition, but it's not lead to good behavior in fulfilling the nutrition of their underweight toddlers immediately. Perceived barrier have strong positive correlation with mother's behavior in fulfilling the nutrition of their underweight toddlers. Based on Pender (2011), perceived barrier is the perception of respondents about the obstacles faced in conducting good behavior. In this research it means the perception of mother about the obstacles faced in conducting good behavior to fulfil the nutrition of their toddlers. The results showed that most respondents have a problem in meeting the underweight toddler's nutrition

because respondents prefer to buy food outside rather than cooking at home. There is also problem due to low incomes that make respondents cooking anything without thinking the nutritions. It is supported by demographic data which showed that the majority of respondents have low income, under minimum standart salary at Surabaya, Indonesia. Family incomes mostly obtained from father, because almost all respondents were housewives and only few become entrepreneur (selling goods at their home). One of respondents said that she think economic factors was the biggest obstacle which inhibit them to provide good nutrition to support the health of their underweight toddlers.

Table 4 had showed that there was correlation between perceived self-efficacy and mother's behavior in fulfilling the nutrition of their underweight toddlers. Moreover, perceived self-efficacy is also defined as the confidence to be able to perform with good health behaviors (Bandura, 2004). Self-efficacy in nutritional fulfilment is about how confidence mother in providing and consuming healthy foods (Grizzle, 2009). Mother with a strong self-efficacy was able to meet the nutritional needs of underweight toddlers. But in fact, many respondents have low self-efficacy and not good behavior in fulfilling the nutrition of their underweight toddlers. Based on interview during respondents fulfil the questionnaire, they express that they didn't confident in providing meals because lack of knowledge about proper nutrition for underweight children. Although public health center already provide nutritional

counseling for the mother of underweight toddler, they still have no confidence.

Activity related affect have correlation with mother's behavior in fulfilling the nutrition of their underweight toddlers. More negative activity related affect will lead to worse behavior in fulfilling the underweight toddlers' nutrition. More than a half of respondents have negative activity related affect and not good behavior in fulfilling the nutrition of underweight toddlers. Activity related affect will influence a person to repeat or maintain behaviors (McEven *et al*, 2011). Many factors influence mother's affection in fulfilling the nutrition of underweight toddlers.

## CONCLUSION

Mother's prior related behavior, perceived benefit, perceived barrier, perceived self-efficacy, and activity related affect have significant correlation with mother's behavior in the fulfillment of nutrition for underweight toddler. Research result had showed that prior related behavior, perceived barrier, perceived self-efficacy, and activity related effect have positive correlation with mother's behavior in fulfilling the nutrition of underweight toddler. Otherwise, perceived benefit have negative correlation. Prior related behavior have the strongest correlation at all.

Nurses should do health promotion frequently to improve mother's behavior in meeting the nutritional needs of underweight toddler, especially to minimize the perception of mother against obstacles. Further research should investigate the other factors which correlate with mother's behavior in the fulfillment of nutrition for underweight

toddler based on HPM.

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# REFLECTIVE LEARNING OF NURSING STUDENTS IN THE PSYCHIATRIC MENTAL HEALTH NURSING PRACTICES USING REFLECTIVE DIARIES : A QUALITATIVE STUDY

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## **ABSTRACT**

**Introduction:** The method of integrating reflective learning practices in the psychiatric mental health clinical nursing experience into nursing students remains a challenge for educators. It is unclear how students perceive the experience using reflective diary in caring clients with psychiatric mental health disorders. **Method:** A purposive sample of 13 nursing students complete reflective diary during clinical placements. The qualitative data was explored by thematic content analysis method using NVivo. **Result:** A total of four main learning themes were identified from the data of the students through a reflective diary. **Conclusion:** These themes reflected the view of the students about what they have learned during their first clinical placement. They develop self analysis, establishing communication skills with patient, apply nursing problem management skills and improve empathic understanding in their first clinical experience in caring clients with psychiatric mental health disorder.

**Keywords:** *reflective learning; nursing students; reflective diaries; qualitative study.*

## INTRODUCTION

Reflective learning is a key to learning from experience. "Reflection" is a key concept in adult education theory and more specifically within experiential learning discourses. From the perspective of the dominant "constructivist" approach to experiential learning, cognitive reflection is the key process through which individuals extract knowledge from their concrete experience (Fenwick, 2001; Illeris, 2007). Jordi (2010) mentioned that when surfaced into awareness through integrative reflective practice, this dialogue constitutes the learning edge of human experience. He also proposed that embodied reflective practices can encourage an integration of varied and often disconnected aspects of our human experience and consciousness. Kolb (1984) proposed that learning from experience occurs in a cycle. The cycle has four phases: (1) concrete experience, (2) abstract conceptualization, (3) reflective observation, and (4) active experimentation. Students can enter the learning cycle at any point, and learn best when they practice all four modes. To illustrate the application of the Kolb model to nursing student development, we provide general examples in clinical nursing practice starting with concrete experience. Concrete experience is "learning by encounter," which can be learning from specific experiences, relating to different people and their experiences, or being sensitive to feelings and people. Students encounter this phase by participating in a one day volunteer activity focused on psychiatric mental health disorder. The activity exposes the student to service and evokes all the senses

(sight, touch, hearing, smell, and taste) while serving a specific population in their hospital. Students see the issue of environment, feel the emotions that surface from interaction with patient.

Seismic changes such as these are occurring at a time when the nursing education generally, and student nurses individually, face regular criticism for poor care and lack of compassion. The scope and function of practical nurses reflect the need for appropriate knowledge and capabilities to fulfill supportive healthcare role (Mahan, 2005). However, there are limited studies asserts the learning process among nursing students in mental health nursing clinical practice. This paper will investigate reflective learning practices in nursing program in which the expectation is to create both critically aware and insightful individuals who are able to function in a healthcare culture that is predominately resource poor, time orientated and outcome led. This is a background to the exploration of the examples of reflective pedagogy that may be applied to nurse professions. The purpose of the study is to qualitatively explore the reflective learning practices among nursing students in the psychiatric mental health clinical nursing experience using reflective diaries.

## METHODS

### Study design

A qualitative design using a phenomenological approach was applied. Cheek & Jones (2003) mentioned that this approach aimed to generate a description of experiences of participants as phenomena.

We interviewed thirteen nursing students. Students were asked to build their analysis around a reflective framework. They were also freed from the obligation to reference work to maximize the opportunity to bring the 'I' to the front of the analysis. In addition the marking criteria were built around Moon's (2004) scale of reflective writing. Writing is one of the most frequent learning mediums for reflective learning with reflective diaries and portfolios being top of the list of populist learner tasks. Moon (2010), among others, discusses the complexities of assessing reflective writing. These include the constraints of being able to express 'self' in academic format; the concern that attaching a mark will reduce the authenticity of the submission, (the student may sense that saying what he/she thinks he/she ought to be saying), as well as the difficulties for assessors in maintaining objectivity and consistency in the marking process. In addition, the skill of reflective writing is seen to be a developing one over time and experience, and can be taught with practice opportunities built into the curriculum (Russell, 2005). In this assignment, attempts were made to address potential writing difficulties.

A purposive sample of 13 nursing students who underwent first clinical placement in a psychiatric mental health hospital participated in this study. This sample consisted of 18 females and 2 males with a mean age of 21.5 years (SD, 0.5; range, 21 to 22 years). The purposive sampling was chosen in this study in order to capture the true reflections of the study participants who had significant knowledge and experience of going through the process of using a

reflective diary. This purposive sampling was chosen to elicit the true experiences of the participants and to prevent data pollution and biases.

### **Ethical considerations**

Permission for this study was obtained from the Ethics Committee of Health Polytechnic Semarang. The students signed informed consent prior to the study. All of the research materials were handled exclusively by the researcher and no student names were associated with any final written materials.

### **Data collection**

All participants had introduced the utilization of a reflective diaries. The format of a structured questions and examples in the reflective diaries was explained to promote reflective diary writing. The students were arranged for a three week clinical posting in a psychiatric mental health hospital, Prof. Dr. Soeroyo Hospital in the second semester of the second year of a nursing program. They were asked to complete their reflective diaries clinical placement. All of reflective diaries were collected the day after the end of the three weeks of clinical placement.

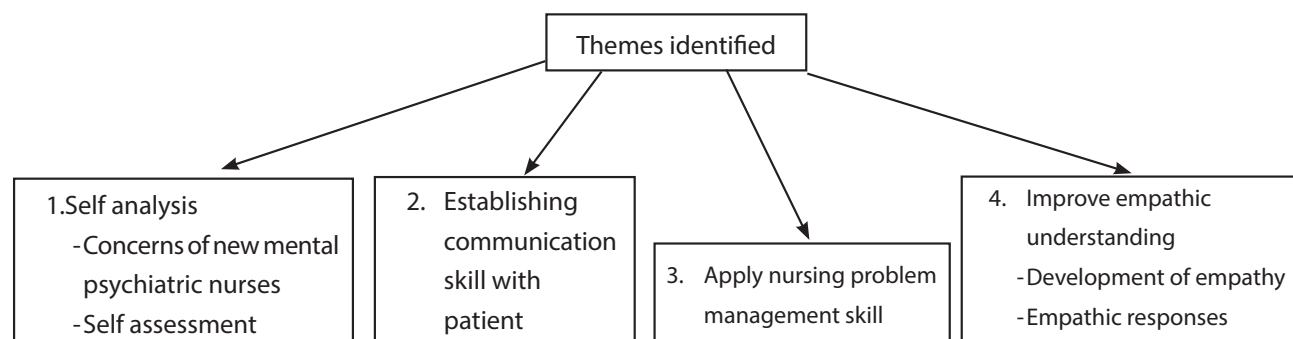
Data analysis was done using thematic content analysis which the process of data analysis was adapted from Burnard (1991). First, researcher went through the data and recorded a preliminary general message from students. Then, the data were analyzed further to identify similarities and differences between the messages. The messages were then unitized into phrases or sentences relating to specific topics. Then, a code was assigned to a text chunk of any size

that represented a single theme or issue of relevance by using NVivo (QSR International Pty Ltd., Doncaster, VIC, Australia) software. Phrases or sentences formed through the reflective diaries of the students were categorized under specific codes. Similar codes were collapsed into fewer, broader themes, and the final theme list emerged. The final theme list was shared with additional researchers to validate the first coding scheme created. General agreement in the coding process was reached and verbatim extracts were taken from the text to illustrate the content of each final study theme.

## RESULTS

A total of 13 nursing students who underwent clinical placement in a government hospital participated in this study. The students demonstrated four common themes in reflective diaries. All of the details are as discussed below.

Analysis of the reflective diaries has shown four common themes with subthemes described in Figure. 1.



**Fig. 1.** Themes generated through analysis of reflective diaries during clinical placement.

### Self Analysis

The nursing students shared their experiences during the clinical placement in the reflective diaries. They were recalling the incidents that happened throughout the first week. They shared their feeling related to mental health setting. The students were encouraged to identify their own feeling, strength and weakness in their clinical setting. The findings demonstrated that students strived to look for self analysis in their pre interaction phase. Below are examples of their thought and feeling as shown in their reflective diaries.

- Concern of new mental psychiatric nurses  
First time, I feel uncomfortable about the lack of physical tasks and treatment (Student A).  
The fact, I was anxious, then I thought that being a new mental psychiatric nurse was a challenge for me (Student D).
- Self assessment  
I have labeled schizophrenia patient that they uncontrollable and unpredictable. I become afraid if they become hostile and uncooperative. Then I realized that I should help them through therapeutic relationship(Student C)

Some students were able to recognize their weaknesses. Although they feel afraid about what they think about patient, they try to start using themselves as a therapeutic tool. They got themselves more adapted and concerns being new mental psychiatric nurses. They began to contact with schizophrenia patients.

### **Establishing communication skills with patient**

Good communication skills are vital to establish a trusting, interpersonal relationship with patients. Compliance of patients towards nursing problem management treatment may be increased through therapeutic communication. Students in this study reflected on problems faced during an interactive session with patients and the approaches they had used to solve the difficulties. The students showed a positive attitude in achieving improvement of their communication skills.

- The most challenging task is to encourage patient in developing relationship, especially to patient with social isolation. I have to be creative in helping patient to increase awareness of strengths and limitation in communicating with other. Besides, I need to do it in the simplest way through role playing so that my patients will be able to understand the exercises and their benefits. (Student F)
- I learned to approach patients in a proper way so that he/she can understand me and give positive feedback when patient reach out to others. (Student J)

- In dealing with patient with hallucination, I need more patience towards them. They distracted easily, having more inappropriate to circumstances. It is hard for them to obey my commands when carrying out exercises. I learnt that we need to refocus patient to topic and give them more encouragement when discuss feeling and impulses, rather than acting on them. (Student K)

### **Apply nursing problem management skill**

In the diaries, the students shared their hands-on experiences during the clinical placement, recalling the incidents that happened throughout the second week. Furthermore, they shared their happiness in applying nursing problem management skills such as patients with self care deficit and anger.

- It was the first time I performed a grooming and self care assistance: bathing/hygiene. It was a really good experience for me. (Student G)
- I studied anger management some time but never had the opportunity to apply them in a clinical situation. Today, I learned and performed anger control assistance for the first time! (Student B)
- I had a chance to assist with the safe and efficient provision of electroconvulsive therapy in the treatment of psychiatric illness and become more familiar with it. (Student E)



### Improve empathic understanding

Of all the reflective diaries, empathic understanding became part of the common events during students' reflection. Two main subthemes were generated in the analysis, which were 1) empathic-development and 2) empathic responses.

#### *Subtheme 1: empathic-development.*

The students were aware of their empathic development during the clinical placement. Improvement in their empathic was mentioned by the students in their reflective diaries. They also recognized their own capability in managing their learning as well as the patients' conditions.

- Met patient with schizophrenia is so much interesting. I learned from them particularly with the teenagers. I will face the situation with self-compassion before I have the conversation. (Student H)
- I demonstrated verbal and nonverbal communication that showing the patient that I have heard them and checking I have 'got' them, until I was both happy with the outcome. (Student L)

*Subtheme 2: empathic responses.* The students had undergone the process of identifying patient responses inadequacies in clinical placement through their reflective diaries. Socio-cultural differences and differences in gender, age, education and ethnicity were the main issues of empathic understanding development in the reflections of students as demonstrated below:

- I kept thinking of managing the elderly schizophrenia patient. I was exhausted because they always forgot about what

we have been talked after interaction. Overall, I took more than 1 hour to complete the whole session. (Student I)

- Basically, I have little experience in those areas of attachment. I have had no chance to perform objective assessment for women's health cases before due to the restrictions in different hospitals. That's why I am not confident in managing those cases. (Student M)

### DISCUSSION

Students play an increasingly active role in their own learning. They would learn the psychiatric mental health nursing routine gradually on ward until they capable to responsible for their patients. Guthrie and Jones (2012) believe that experiential learning and reflection are critical to maximize leadership learning. The analysis of the learning diaries provides information on of practical experiences from the first clinical placement. The results demonstrated the process of transition in the performance of students from the academic to the clinical setting. The learning reflective diaries were useful for clinical evaluation. The findings of the current study supported the fact that there are three domains of contemporary psychiatric nursing psychiatric: direct care, communication and management (Stuart, Laraia, 2005).

The results showed that the students focused much on their self analysis during their first week in clinical placement. In this study, through analysis of learning diaries, specific skills such as communication skills with patient, nursing problem management

skills were experienced by students in their learning process. The students shared a number of clinical experiences, which ranged from their first experience on selective communication skills until the end in their difficulty faced during nursing problem management skills in different age. The findings are consistent with William & Webb (1994) observed the emotional response of students meeting with unfamiliar or new learning events, followed by development of coping strategies, evaluation of learning outcomes, and an increase in their confidence level with successful events in their learning process. In the current study, the students showed a similarly positive attitude in facing their limitations and improved with reflection on the good and bad points among them. Writing reflective diaries is strongly recommended for students in their clinical placement. It is a powerful method for students to express their emotions based on good and bad experiences during practice (Ganesh, 2010). The results of this study showed that the topic of communication was stressed by students in their reflective diaries. Students strived to obtain patient compliance during the treatment process through effective communication skills.

Reflective learning can enhance the capacity, the confidence and the resilience of the individual to be emotional sensitive and responsive to the complex needs of vulnerable people, particularly if teaching strategies are tailored and varied to respond to a range of learning styles (Conlon, Gould, 2014). A whole

program approach to reflection increases the likelihood of students achieving insight into and confidence in reflective practice. Horton-Deutsch, McNelis and O'Haver Day (2012) describe the introduction of a reflection centered curriculum as one that adds depth to learning in both practice and theory components. Reflection supports students to integrate personal and professional qualities. However, beliefs about professional roles and responsibilities, emotional vulnerability and issues of group dynamics can restrict participation in reflective activities.

The main weakness of the qualitative study is that it is not possible to make quantitative predictions. However, the strength of this research is that this study provides an understanding and description of students' personal experiences of using their reflection of how learning takes place individually in a clinical atmosphere.

## CONCLUSION

In conclusion, reflective diaries were shown to be important in clinical experience for nursing students. A major benefit in this study was that thenursing students were being encouraged to develop individual learning methods. The students successfully identified their individual learning needs while recognizing the value of their clinical experiences through reflection. Therefore, reflective learning should be considered an integral part of professional practice in nursing education.

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# ANALYSIS OF PUBLIC BEHAVIOR IN THE USE OF FAMILY TOILET IN THE VILLAGE BAKTI, DISTRICT PULUBALA, GORONTALO

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## ABSTRACT

**Introduction:** Coverage of sanitation in Indonesia still needs to be improved, where the percentage of families who qualify latrines in rural areas by 52% and urban 77.4% (Depkes RI, 2008). Purpose of research for analyze behavior the public using family toilet in the village Bakti district Pulubala district Gorontalo. **Method:** This research was an analytical survey with cross sectional approach. The sample is all households in the village Bakti district Pulubala, Gorontalo by the year of 2014. Sampling techniques conducted *purposive sampling* and sample size of 85 people. Results: The study uses statistical *Chi-Square* test with a significant level of  $\alpha = 0,05$  obtained results  $x^2_{count} 5,113 > x^2_{table} (3,841)$  which means that  $H_0$  is rejected and  $H_a$  is accepted or no knowledge of the relationship between use of household toilets, for the attitude of the results obtained  $x^2_{count} 4,395 > x^2_{table} (3,841)$  which means that  $H_0$  is rejected and  $H_a$  is accepted or there is a relationship between attitudes to the use of household toilets and for measures obtained results  $x^2_{count} 4,142 > x^2_{table} (3,841)$  which means that  $H_0$  is rejected and  $H_a$  is accepted or there is a relationship between the action with the use of household toilets. **Discussion:** The need for the empowerment of the community in an effort to promote household toilets, so the gathering latrine program can be implemented effectively and efficiently in the study site in particular and Gorontalo generally.

**Keywords:** *Using family toilet, knowledge, attitudes, actions*

## INTRODUCTION

Gorontalo's health profile in 2011–2013 showed that the coverage of using toilet in 2011 amounted to 42.3%, in 2012 the use of family latrine coverage 41.5%, while in 2013 the scope of use of toilet 41.2% (district health profile Gorontalo 2011–2013). Desa Bakti number of residents in the District Pulubala 2011 was 1786 inhabitants with the number of families as much as 496 families while the number of houses located in the village of 491 houses Bakti is the number of houses that no pit is 361 (73.5%) of the house. In 2012 with a population of 1809 inhabitants with the number of families as much as 504 families while the number of houses located in the village of 498 houses Bakti is the number of houses that no pit is as much as 364 (73.1%) of the house while in 2013 total population of 1905 souls with a number of families as much as 516 families while the number of houses located in the village of 503 houses Bakti is the number of houses that no pit is 369 (73.4%) of the house. Based on these problems, this research aimed to determine the relationship of knowledge, attitudes and actions with the use of household toilets in the village Bakti, District Pulubala, Gorontalo in 2014.

Results of this study are very important to provide information and recommendation for a proper strategy in community empowerment in order to promote family latrine, so that the implementation PABPL program can be implemented effectively and efficiently.

### 1. Family toilet

Family toilet is a building that is used for throwing and collecting dirt/unclean man,

commonly called latrines or toilets, so that the waste is stored in a specific place and not be a cause or spreaders of disease and pollute neighborhoods. Human excrement dumped into everyday practice mixed with water, the treatment of human feces is basically the same as the waste water treatment plant (Salah 2008). Criteria for a healthy family latrine according to MOH (2008), as follows:

- 1) Do not contaminate drinking water sources, to the location of the septic pit at least 10 meters from wells (SPT SGL and other types of wells). Exceptions this distance becomes farther on clay or chalky conditions related to soil porosity. There will also be different in topography make latrines position on the face and the direction of groundwater flow.
- 2) Odorless and does not allow the insects can get into the shelter feces. This example can be done by closing the pits or with swan neck system.
- 3) The urine, water purifier and water penggelontor not contaminate the surrounding soil. This can be done by making the latrine floor with an area of at least 1x1 meters, with a sufficient angle towards the pits.
- 4) Easy to clean, safe to use, for it must be made of strong materials and durable and that are not expensive materials should be used that is local.
- 5) Equipped with protective walls and roofs, walls and brightly colored waterproof.
- 6) Self illumination.
- 7) Floor waterproof.
- 8) Spacious room enough, or too low.
- 9) Ventilation is good enough.
- 10) Available water purifier.

Lack of attention to the management of stool accompanied by rapid population growth, will accelerate the spread of diseases that are transmitted through feces. Based on existing research results, a normal stool

is estimated to produce an average of 330 grams a day, and produce urine or urine of 970 grams (Soekidjo, 2003). Whatever the chain pursued most important thing is to do some preventive measures as early as possible so that the transmission of the disease does not occur. This can be done by isolating the feces as a source of infection, so that the agent may not reach a new host. Approximately there are 14 kinds of infectious disease transmission chain can be decided through hygiene and sanitation activities. Hygiene and sanitation activities are also not only the availability of clean water and latrines family alone, but more influenced by the hygienic behavior (Harijanto, 2009). The types of latrines are in accordance with the rural technologies are as follows: 1) pit latrines/latrine, 2) Latrine "plengsengan", 3) Latrine Goose Neck, 4) Latrine Fertilizer.

## **2. Community Empowerment in Using Family toilet**

Community empowerment in the use of household toilets is an effort to increase public participation, where efforts are illustrated in the form of various activities and targets with the aim of public awareness in order to better use all the capabilities it has both in its natural form, energy and opportunities and to explore initiatives them to more activities and investment in order to achieve a better standard of living, particularly in the use of household toilets (Muthmaina, 2009). Community empowerment is basically a process, which is a continuous effort. Because the objectives to be achieved will not be visible in a short time, so that the process requires a target which is a prerequisite for

the achievement of objectives.

Goals in community empowerment, among others, is to create conditions as Waddah or the means to be able to mobilize and direct the potential of society, then society's potential to enhance the quality of the exercises. When the conditions have been created and people can already be redirected means the next opportunity enhance the quality of community potential is already open. The next effort is to try continuity program to improve the welfare of society as a whole (Sutejo, 2003).

## **3. Behavior Analysis Society with the use of household toilets**

### **a. Knowledge**

Knowledge is the result of know and this occurred after people perform sensing on a particular object. Sensing of the object occurs through the senses mannesia, namely: sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears (Notoatmodjo, 2007). Knowledge covered in the cognitive domain has 6 levels, namely 1). Knows (know), 2) Understanding (comprehension), 3) Applications (application), 4) Analysis (analysis), 5) Synthesis (synthesis), 6) Evaluation (evaluation). Thus the knowledge one can describe the amount of influence the attitudes and behavior in the development of the whole person and participation in work activities. Knowledge is one of the social forces that come shaped and shaping the future of mankind itself so knowledge also influential in one's discipline in using latrines as one of the environmental health facilities to dispose of feces or feces (Santoso 2008).

Research conducted by Widyana (2008), about the factors that affect the use of family latrines in the district of Bantul. The results showed that there was a relationship of knowledge with the use of household toilets in Bantul.

### **b. Attitude**

Attitude is a reaction or response of someone who is still closed to a stimulus or object. Attitude is not an act or activity but new predispose action or behavior. That attitude is a closed reaction is not an open reaction. As well as knowledge, sikapun consists of various levels namely: 1) Receiving (receives); 2) Responding (responded); 3) Valuing (appreciate); 4) Organisation; 5) Characterization by a complex value Positive and negative attitude towards the use of household toilets can not be separated from social and cultural factors such as education, employment and public confidence that shape the behavior of healthy and unhealthy life depends on the influence of socio-cultural factors above (Anwar, 2009). Mohammad Sholeh's research in 2008 showed that that there is a correlation between socio-cultural factors with the attitude of the family latrine utilization (Sholeh, 2008).

### **c. Action**

An attitude not automatically manifest in an action (Over Behavior). For the realization of attitude becomes a tangible actions necessary supporting factor or a condition that allows, among other facilities. As for the level of practice or act according to Soekidjo Notoadmojo as follows: a) Percaption (perception); b) Guided Response (Response

Guided); c) Mechanism (mechanism); d) Adaptation (adaptation). Action on positive behavior in the use or utilization of toilet lies in the ability to act or do something that drives someone willing to take advantage of family latrines (Sarwono, 2007). According to Sony Admiral (2008), who has been researching on the utilization factor of the family by the community latrine states that measures relating to the utilization of family latrines in the village Binangun Banyumas (Muthmaina, 2009).

### **METHODS**

This research was analytic survey with cross sectional study design. The location of this research is Bakti Village District of Gorontalo Regency Pulubala 2014. The data was collected for approximately one month, from February to April 2014. Population and sample were heads of families who are in the village of Bakti District of Gorontalo, totally 516 households.

### **RESULTS**

There were 36 respondents (42.4%) were aged 25-29 years old, while 1 respondent (1.2%) was aged 45-49 years old. Distribution of respondents by educational level showed that of 85 respondents, mostly had secondary school education level (37.6%), while 10.6% had college education. Distribution of respondents by type of occupation showed that of 85 respondents, the highest percentage was category private jobs as many as 32 respondents (37.6%), while the lowest percentage was category civil servants as many as 10 people (11.8%).

Distribution of respondents by family

toilet use showed that 57 respondents (67.1%) use family latrine. Distribution of respondents by level of knowledge showed that Dari total respondents 85 persons obtained the highest percentage of knowledge sufficient category are as many as 51 people (60.0%). On the other hand, distribution of respondents by attitude showed that of 85 persons respondents, 50 respondents (58.8%) had attitude in category. Distribution of respondents by the action, 58 respondents (68.2%) had "sufficient" action.

Of the 85 respondents, 34 respondents had less knowledge which 18 respondents (52.9%) use the family latrines and 16 respondents (47.1%) did not use it; while 51 respondents had sufficient knowledge which 39 respondents ( 76.5%) use family latrines and 12 respondents (23.5%) did not use it. Of the 51 respondents who have enough knowledge categories, 12 of them still use the family toilet. This could occur because the respondent has a sufficient number of family members so as to use a lot of toilet have to queue. Therefore, respondents chose to throw his business elsewhere. The results of data analysis using statistical test Chi-Square at 4:20 table with a significant level of  $\alpha = 0.05$  was obtained results  $\chi^2_{(count)} \wedge 25.113 > \chi^2_{Table} \wedge 2 (3,841)$ , which means that  $H_0$  is rejected and  $H_a$  is received or there is a relationship between knowledge and use Desa Bakti family latrine Pulubala District of Gorontalo district in 2014. To find a meaningful relationship or not used  $p$  value, is said to be significant if  $p$  value  $< 0.05$  where  $p$  value in this study is 0,024 so that this research has a significant correlation. To know the strong correlation  $\phi$  used in this study was 0.245 means the correlation

is weak means knowledge contribution of 24.5% to the use of household toilets.

35 respondents had attitude in less category in which 19 respondents (54.3%) use the family latrines and 16 others (45.7%) did not use it; while 50 respondents had attitude in enough category in which 38 respondents (76.0%) use the family toilet and 12 others (24.0%) did not use it. This situation can happen because the respondents have daily work outside the home for example farmers or fishermen who did not allow respondents to defecate in latrines family, so that respondents prefer chapter location where it works for example paddy fields or the sea.

Data analysis by statistical test Chi-Square with significant level of  $\alpha = 0.05$  showed that  $\chi^2_{(count)} \wedge 24.395 > \chi^2_{Table} \wedge 2 (3,841)$ , which means that  $H_0$  is rejected and  $H_a$  is received, or there was a correlation between attitudes in using family latrine at Desa Bakti, Pulubala, Gorontalo in 2014. To find a meaningful relationship or not used  $p$  value, is said to be significant if  $p$  value  $< 0.05$  where  $p$  value in this study is 0,036 so that this research has a significant correlation. To know the strong correlation  $\phi$  used in this study was 0.227 means a weak correlation means contributing 22.7% attitude towards the use of household toilets.

There were 27 respondents had act in less category in which 14 respondents (51.9%) use the family latrines and 13 others (48.1%) did not use it; while 58 respondents had act in enough category in which 43 respondents (74.1%) use the family toilet and 15 respondents (25.9%) did not use it. This situation could happen because there were



respondents who do not have their own family latrines at home, while for public toilets reach far enough away from the residence of the respondent so that respondents prefer to defecate in the river. The results of data analysis using statistical test Chi-Square at 4:22 table with a significant level of  $\alpha = 0.05$  was obtained results  $\chi^2_{(count)} > \chi^2_{Table}$  (3,841), which means that  $H_0$  is rejected and  $H_a$  is received or there was a correlation between the action with the use of Desa Bakti family latrine Pulubala District of Gorontalo district in 2014. To find a meaningful correlation or not used  $p$  value, is said to be significant if  $p$  value  $< 0.05$  where  $p$  value in this study was 0.042 so this research has a significant correlation. To know the strong correlation  $r$  used in this study was 0.221 means a weak correlation means that the contribution of 22.1% action against the use of family toilets.

## DISCUSSION

Knowledge is the result of know and this occurred after people perform sensing on a particular object. Sensing of the object occurs through the senses mannesia, namely: sight, hearing, smell, taste and touch. Knowledge is one of the social forces that come shaped and shaping the future of mankind itself so knowledge also influential in one's discipline in using latrines as one of the environmental health facilities to dispose of feces or feces. Some previous studies among other research that has been conducted by Muthmaina (2009) concerning the use of toilet family, stating that knowledge is one of the causes of the respondents take advantage of the family toilet. Research conducted by Widiana (2008), about the factors that affect the

use of family latrines in the district of Bantul. The results showed that there was a relationship of knowledge with the use of household toilets in Bantul (Muthmaina, 2009).

Research conducted at Di Desa Bakti District of Gorontalo Regency Pulubala out in 2014, about the use of household toilets stating that knowledge is a very important factor in the utilization of family latrine. Knowledge one can describe the amount of influence the attitudes and behavior in the development of the whole person and participation in work activities. Knowledge is one of the social forces that come shaped and shaping the future of mankind itself so knowledge also influential in one's discipline in using latrines as one of the environmental health facilities to dispose of feces or feces.

Positive and negative attitude towards the use of household toilets can not be separated from social and cultural factors such as education, employment and public confidence that shape the behavior of healthy and unhealthy life depends on the influence of socio-cultural factors above (Anwar, 2009). Some previous studies among other research that has been conducted by Mohammad Sholeh 2008 on the factors associated with the utilization of family latrines in Jepara district in 2007, stated that there was a correlation between socio-cultural factors with the utilization of family latrine stance. Sutejo research results (2003) from the University of Diponegoro on the analysis of the behavior of people in the use of household toilets in two villages in Rembang, stating that a positive attitude can affect the respondent to take advantage of the family toilet.

Research conducted at Di Desa Bakti District of Gorontalo Regency Pulubala out in 2014, about the use of household toilets stated that there is a correlation between attitudes to the use of household toilets. But there are still some people who have attitudes that are lacking in the use of toilet, the main reason why people are always disclosed to date have not had toilet is not or does not have the money to build latrines. But actually the absence of latrines in each household is not merely an economic factor. But more to the awareness of the public to adopt a healthy lifestyle (PHBs), toilet did not have to be fancy is too expensive. In addition there are other factors that lead to people unwilling to make or build a latrine that dependence on government assistance in terms of building latrines. This is part of the past mistakes in the implementation of policies that tend to spoil the public. Latrine construction program undertaken during less than optimal, especially in building the society changes. The approach taken has characteristics that are oriented to construction or physical building latrines, without any education efforts to live a clean and healthy behaviors (PHBs) adequate besides recommended latrine design is often expensive for poor families. Project subsidies are not effective in reaching the poor. Latrines built, but are often not used by the people. Thus the need for improvement of public attitudes toward better in using latrines.

Action on positive behavior in the use or utilization of toilet lies in the ability to act or do something that drives someone willing to take advantage of family latrines (Sarwono, 2007). Some previous studies among other

research that has been conducted by Sony Admiral (2008), who has been researching on the utilization factor of the family by the community latrine states that measures relating to the utilization of family latrines in the village Binangun Banyumas. In addition, research conducted by Arsunan, et al (2003) which states that negative action against the use of latrines, providing great opportunities for contracting the disease, compared with people who acted positive by always throwing dirt on the toilet (Muthmaina, 2009).

Research conducted at Di Desa Bakti District of Gorontalo Regency Pulubala out in 2014, about the use of household toilets stated that there was correlation between the action with the use of household toilets. Most respondents have enough action (68.2%) in the use of household toilets, but there are still some of the respondents who have less action, it is due to defecation in latrine family is still a new habit, and less commonly practiced by most In Desa Bakti community. Overview of defecation in Desa Bakti is almost the same as the picture nationally. Based on observations, the people in this village who use latrines to defecate while only reached 68.2%. It seems disposal of human waste is still a problem in the environmental health and closely related to the socio-cultural aspects. To change the habits of the population takes a long time. A new habit will be accepted by the public if the habit is felt more useful than the old ones. A new habit requires a long and lengthy process, because it involves a variety of factors including value, perception, knowledge, attitudes, and traditions. Similarly, regarding defecation, results of interviews with observations

indicate that a small portion of respondents throw dirt in the river, rice fields or gardens. Such circumstances illustrate that society in general is difficult to change habits.

## CONCLUSION ND SUGGESTION

### Conclusion

Based on the results of research, it can be concluded that there was a correlation between knowledge, attitude and actions with the use of household toilets.

### Suggestion

It is needed to do education periodically and community empowerment in order to support the use of family latrine, so that the implementation of a healthy life style such the program family latrine can be implemented effectively and efficiently in the research site in particular and Gorontalo district in general.

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# THE PERCEPTION OF NURSES IN THE IMPLEMENTATION OF FAMILY HEALTH NURSING IN HEALTH CENTER SOUTH KREMBANGAN SURABAYA

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## **ABSTRACT**

**Introduction:** Family health nursing is an activity that is strategically important and has a great leverage to the success of health development. Research Health Facilities (Rifaskes) National in 2011 the percentage of family nursing care achievement in health centers is 61%. Data East Java province percentage of family nursing care achievement in 2013 was 63%, while the percentage achievement of Surabaya lower at 24%. This study was conducted to determine the factors that affect nurses in implementing the nursing care of the family. **Method:** The design of the study was qualitative in-depth digging the informant, key informant interviews and triangulation of information. Research location health center in South Krembangan Surabaya. Informants purposively selected as 8 people, data analysis performed by an interactive model. **Result:** This study produced data that there are six factors that influence the lack of implementation of family nursing care is rewarded, policy leadership, teamwork, facilities and infrastructure, the amount of work to be done, and the lack of ability. **Discussion:** Perceptions of Nurses in implementing family nursing care will affect motivation in carrying out activities. The formation of such perceptions are influenced by knowledge, desire or expectation and feelings. The proposed recommendation to increase understanding of nursing care nurse about family, team work, division of tasks in accordance with the authority, meets the necessary infrastructure and policy of the head of the health center for the implementation of family nursing care.

**Keywords:** *family nursing care, compensation, policies, teamwork, tools, task working, ability*

## INTRODUCTION

Nursing is a profession in the field of health contribute to the development of family nursing services (Kemenkes RI, 2010). The nurse has a fundamental duty to provide nursing care to individuals, families, groups and communities (Kemenpan RI, 2001). Family health nursing is family nursing care integration with other health services in the home to support the health care policy in the community so that it can address the client's health problems and family at home.

Evaluation of the role and functions of a public health nurse at the health center and outlying remote areas in 10 provinces that have implemented the 2005 data showed that the family nursing service has not been implemented optimally (Kemenkes RI, 2010). Research Health Facilities (Rifaskes) National in 2011 the percentage of achievement coaching prone family nursing care in health centers throughout Indonesia is 61%. While in East Java province percentage of family nursing care coaching achievement in 2013 was 63%. Based on the report on the development of nursing services family of East Java Provincial Health Office, the percentage of attainment is lower than the percentage of East Java city of Surabaya is 24%. Data from the Health Department of Surabaya, the average percentage of family nursing care in all health centers is still low, including health center in South Krembangan Surabaya.

The impact of the low percentage of implementation of family nursing care will reduce the family's ability to perform the maintenance of health, so will result in a

decline in the status of public health in general.

The low percentage of family nursing services in the city of Surabaya unknown causes. It is therefore necessary to obtain information about the factors that affect the implementation of family nursing care nurse perception. Perception is the experience of objects, events obtained by inferring information, then the individual is aware of something that is perceived (Sunaryo, 2014; Rachmat, 2014). Nurses perception about the factors that affect the implementation of nursing care is individualized so that the need to obtain information in order to do follow-up effort.

This study wants to explore the perception of nurses on factors that affect the implementation of nursing care keluarga.

## MATERIALS AND METHODS

This study used a qualitative approach in order to uncover phenomena that exist in the field, then studied more in depth. Information obtained drafted into the text that emphasizes the issue process and meaning. The information in the form of information, opinions, view related to the implementation of family nursing care.

Informants in this study is a nurse at the health center South Krembangan Surabaya amounting to 8 people and leaders of health centre in South Krembangan Surabaya. Data collection techniques used were in-depth interviews.

The instruments used in data collection is the researchers themselves. Supporting tools are guidelines interviews and field notes.

## RESULTS

Informants in this study were nurses aged between 28–34 years. Educational background all graduates of Diploma of Nursing, all married, work experience 9 year 1 person (12.5%), 6 years 4 person (50%), 4 years and 3 person (37.5%).

Results and analysis of research based on themes found in the nurse's perception about the factors that affect the implementation of family health nursing include rewards, policy leadership, teamwork, facilities and infrastructure, assigned tasks, and lack of ability.

Rewards affect the implementation of family nursing care. The whole informant stated remuneration/salary/incentives affect the implementation of family nursing care. Results of interviews obtained the following data:

"... Cash honorariums also necessary, if no yes ... can not do coaching ..."

"... Nurses need eg. money transport because it takes money ..."

"... Nurses need to support its performance fee ..."

The policy of the Head of health centre affect the implementation of family health nursing. This is consistent with the statement of the informant:

"... Head of the health center policies do we need to get comfort and security at the time of askep family ..."

"... The activities of home visits of heads of health centers in need of protection ..."

"... The rules of the head of the health center is necessary so that we can carry out the family nursing care ..."

Informants do not know about the policy

of the Ministry of Health about the family nursing care:

"... I really have not heard of that rule yes mam ..."

"... Has never been a socialization of mam ..."

Teamwork required at the time of carrying out family nursing care. The statement is as follows informant:

"If families need to carry out research agreement nursing team, in order to complement each other ..."

"... Without the cooperation seems to be difficult to carry out the activities ..."

"... Because so many activities at the health center and its little ... teamwork required for the implementation of the activities ..."

Other information obtained limited number of nurses at the health center, so that the necessary cross-team collaboration for health programs. Interview results also obtained the following data:

"... Limited human resources, so that arrangements need nursing schedule for the implementation of the family ..."

"... It took special time to perform nursing his family ... necessary arrangements ..."

Facilities and infrastructure required to implement nursing care nurse when the family. Informant statement is as follows:

"... The availability of the facilities are supporting the activities ..."

"... The facilities are adequate, greatly facilitate the process of family health services tend to be carried home visit ..."

"... In the absence of nursing facilities .. implementing nursing family not running ..."

The number of tasks or responsibilities given to each informant also affect the implementation of family nursing care.

"... I am responsible for the 11 programs ..."

"... I get 5 program ..."

"... Every Nurses get at least 3 program ..."

Head of health centre also add "... Has become a real family services program, but patients who are in the building too much and need a service ... average more than 100 patients every day in the building ..."

"... Not to mention the report to be made, there are 70 reports that must be reported by the health center every month ..."

The ability to implement family care nursing also affect the implementation of family nursing care, only one informant stated as follows ... The ability to implement family health nursing also affect mam ... If less ability usually do not want to visit the house of confidence ..."

## DISCUSSION

Perception of nurses on the implementation of family nursing care affect motivation in carrying out these activities. Knowledge, desire or expectation and feelings affect one's perception (Bimo Walgito, 2004). Perceptions are formed this will affect the behavior of nurses (Mulyana, 2000). Based on data submitted by the informant, that the nurses in performing nursing care is influenced by reward/services. Factors reward/services/incentive effect on work behavior and will affect the productivity of a person. Rewards are used as motivation at a level of achievement and behavior and affect working relationships within an organization (Davis, Keith, and John W. Newstrom, 2003). Reward or compensation is an overall remuneration received by an employee as a result of implementation of the work is

organized in the form of money or other, may be salaries, wages, bonuses, incentives and other benefits such as health benefits, allowances weekdays, money for food, leave and so on Other (Hariandja MTE, 2002). According Notoatmodjo (2009) the objective of compensation policy is to appreciate the achievements of employees, ensure fairness salaries of employees, retain employees or reduce employee turnover, employees obtain quality, cost control, and meets the regulations. The results also mentions that rewards affect a person's performance (Anggi Supri, 2011).

Reinforcing Factor that affect nurses are carrying out nursing care family rules or policies Head of Puskesmas. Anderson (in Widodo, 2001) defines the policy as a series of actions that have a specific purpose followed and implemented by the actors in order to solve a particular problem. Family nursing care policy of the Ministry of Health No. 908/Menkes/VI/2010 had been socialized since 2011 throughout Indonesia. This policy governing the technical activities of family nursing services performed by nurses. But has not been well communicated to the health centre level. In accordance with the results of interviews with informants all do not know about Kepmenkes RI, so that nurses expect no policy of the Head of Puskesmas.

Cooperation is a component that affects nurses carry out family nursing care. Cooperation is a form of work normally done by the individual but done jointly by two or more persons with the aim that the job becomes lighter. Humans as social beings who always need another person in life (Widiastuti, 2011). Schedule arrangements required in teamwork, described in Iswanto



Yun (2002) that need team collaboration division of roles within the team so teamwork becomes effective. Nurses effective team work is also influenced by several components: first, team members should have the same goal. Nurses who form a team must have the same goal. Each nurse as a member of the team must have a high enthusiasm for carrying out family nursing care. This affects the motivation enthusiastic nurse in fulfilling its responsibilities (Widiastuti, 2011).

Enabling factors that affect nurses in implementing family nursing care facilities and infrastructure (Green et al, 1998). A nurse who conduct family nursing services will perform various actions such as physical examination, direct nursing care in accordance family problems, health education and other measures required to tackle the health problems of family members were carried out in accordance with the authority of the Nurse. Guidelines for the implementation of family nursing services from East Java Provincial Health Office explained that the facilities required by the nurse when performing home visits are a nurse or Kit Bag, tools for physical examination, set wound care, emergency sets, set gastric tube placement, set huknah/klisma, bathing set, set for making preparations for the inspection of laboratories, equipment for laboratory examination is simple: Hb Sahli, glukotest, protein and glucose in urine, set for infusion, injection/injectable (East Java Provincial Health Office, 2011).

Tasks performed by nurses in health centers not only in the building, but also outside the building. Based on Kepmenpan in 2011 that the main duty nurse at the

health center is carrying out nursing care to individuals, families, groups and communities. The real conditions of nurses at the health center is also responsible for public health programs. The many responsibilities granted to a limited human resources affect nurses in implementing the nursing care of the family. Sofyan SR (2010) research results explains that the division of labor affects one's work productivity.

The ability of nurses affect the implementation of family nursing care. Results of the study explained that the nurse's ability to affect the performance (Sabarulin et al, 2013). Other studies have also explained that the factors that most strongly influence the performance of a person is the ability (44.8%) (Hafizurrachman, 2009). The ability of nurses needed in the implementation of family nursing care is an understanding of the concept of family nursing care, the ability to perform a physical examination and investigation, the ability to determine the nursing problem, the ability to perform various nursing actions in accordance with the nursing problems are found, the ability to communicate with the approach and culture the ability to assess the success of nursing actions performed.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

Nurses perception about the factors that affect the implementation of family nursing care is their reward, policy Head of Puskesmas, team collaboration infrastructure, tasks assigned and kamampuan nurse.

## Recommendations

The proposed recommendation to the Head of health Centre South Krembangan Surabaya is to increase the knowledge of nurses on family nursing care, advocating for remuneration for nurses, the division of tasks in accordance with the authority, establishment of work teams, meet the necessary infrastructure and develop policies for the implementation of family nursing care.

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# THE EFFECT OF ROLE PLAY METHOD TO THE FALL RISK SELF CARE MANAGEMENT AMONG ELDERLY IN RW II KELURAHAN MANYAR SABRANGAN SURABAYA

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## ABSTRACT

**Introduction :** The incidence of falls in the elderly might occur due to aging process. Self care management of elderly was essential to prevent the incidence of falls in the home environment. Role play is a method of health education by studying, seeing, listening and doing something that was already planned. The purpose was to describe the influence of role play method to increase the self-care management of the risk of falling in the elderly in RW II Manyar Sabrangan Surabaya. **Method:** Designs using a one group pre-post test pre-experimental design. Affordable population in was elderly in RW 2 Manyar Sabrangan Surabaya. Samples were obtained by using purposive sampling as many as 15 elderly with risk of falling. The independent variables were the health education about self care management of the risk of falling using role play, while the dependent variable in this study was self care management of the risk of falling. Data was collected using a questionnaire, and then analyzed using the Wilcoxon Signed Rank Test with p significant  $\leq 0.05$ . **Result:** Wilcoxon Signed Rank Test showed a significant increase in self-care management with  $p = 0.000$ . **Discussion:** The method of role play gave effect to the increased of self-care management of the risk of falling in the elderly. Therefore, it was recommended to elderly and nurses to use these activities to improve self-care management to prevent the incidence of falls in the home environment.

**Keywords:** *elderly, role play, self care management, the risk of falling*

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# PERFORMANCE ANALYSIS OF CLINICAL NURSE USING APPROACH OF THE PERFORMANCE THEORY AND NURSING DOCUMENTATION

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## ABSTRACT

**Introduction:** Nursing service sare an important part of health services in determining the quality of hospital services. Nurses require the system to perform nursing interventions. The system consists of structures, processes, and professional values that manage the provision of nursing care including documentation. Therefore, it is necessary to analyze the nurse performance using approach the performance theory and nursing documentation. **Method:** In the performance analysis, data collection method uses stratified random sampling of all nurses in the inpatient unit. Measuring tool used in this research was observation services and distributing questionnaires performance of nurses in the inpatient unit. Based on research conducted in one of hospital showed that three reasons patients were not satisfied and switches to another hospital, that 54% of patients feel uncomfortable, 23% of patients felt long service time, and 23% of patients feel poor service quality on health workers, including nurses. **Results:** Results of research at another hospital showed that there were 83.3% of nurses had good knowledge with the completeness of documentation was suitable, there were 86.4% of nurses hadl ack knowledge with the completeness of the documentation was not suitable, there were 100% of a positive attitude with the completeness of the documentation was suitable, there were 88.9% of a negative attitude with the completeness of the documentation was suitable. **Discussion:** Therefore, to improve the performance of nurse needs to be implemented Professionals Nursing Care Model, improvement of competence, implementation of there-evaluation ofthe nurse workload, and the addition of administrative personnel.

**Keyword:** *nurse performance, clinical nurse, performance theory, nursing documentation*



## INTRODUCTION

Nursing services is an integral part of health care in determining the quality of hospital services, because nursing care is given continuously for 24 hours and follow the standards of health care. Under these conditions, nursing has a major contribution to realizing the implementation of health development programs that have been set by the government of Indonesia. Nursing services are an important part of health services in determining the quality of hospital services.

Nurses require the system to perform nursing interventions. The system consists of structures, processes, and professional values that manage the provision of nursing care including nursing documentation. Nursing documentation is a means of communication between health workers in order to restore the patient's health. Correct documentation is evidence of nursing care activities carried out by a person who has been a professional nurse as a liability in efforts to improve the quality of nursing services and improvement of the health status of patients in hospital (Nursalam, 2008).

Factors affecting the performance of nurses must be managed by a nursing manager as well. The implementation of there-evaluation of the workload of nurses in the hospital inpatient room still needs to be done periodically because it was still found levels of workload medium category. Nurse's workload should be optimized so that nursing care services for the better.

The addition of administrative personnel should also be taken into consideration in the inpatient unit, due to too much administrative work will reduce the nurses

to perform nursing care to patients, thereby reducing the quality of nursing services. Nursing staff have a great contribution in the development of services at the hospital, so that there should be improved professionally the service care system and development of clinical management for nurses and midwives.

## METHODS

The research reviewed in the article aims to determine the difference in the nurses performance value in the room by using stratified random sampling of all nurses working in the inpatient unit. To ensure the achievement of work performance required of a policy that ensures the implementation of nursing care. Therefore, research is needed to generate a nursing policy based on performance through the efforts of suitability job placement for nurses and efforts to provide protection against the risks and dangers of nursing jobs.

Sample selection is done with stratified random sampling method. Data were collected using questionnaire and the results were analyzed by Chi Square test and multivariate (logistic regression). Research parameters used to measure the performance of nurses is by observation services and distributing the questionnaires of nurse performance who served in the inpatient room. Results of research showed that the level of competence, the completeness of documentation, implementation MAKP and analysis of nurse workload can improve the performance of nursing that patient satisfaction with health services in hospitals for the better.

## RESULT AND DISCUSSION

Base on literature review showed that some hospitals in Indonesia have problems in terms of service, so this affects client satisfaction. Survey in 2010 by the East Java Provincial Health Office obtained an average patient satisfaction data in East Java for 60.77% of patients and families are satisfied while in 2011 increased to 67.63% of patients and families are satisfied. Based on research by Margareta Bogar (2012) showed that three reasons patients were not satisfied and switches to another hospital, that 54% of patients feel uncomfortable, 23% of patients felt long service time, and 23% of patients feel poor service quality on health workers, including nurses.

Research results of the psychiatric hospital nurse showed that the variable of nurse competence, the patient's condition and the application of Professionals Nursing Care Model (MAKP: Model Asuhan Keperawatan Profesional) had a significant influence on the performance of nurses. Based on the research also showed that the nurse in the MAKP rooms had the competence and the performance was better than the rooms that have not applied MAKP. This was evidenced by the average value of competence of nurses in the MAKP room 4.05 and 3.88 for non-MAKP room. It was average value of performance of MAKP room 4.10 and 3.53 non-MAKP room for a scale of 1 to 5. MAKP variable application became the dominant factor affecting nurse performance, competence became a second factor that affecting the performance of nurse, while patient's condition variables affected degradation the nurse performance. There by to improve the nurse performance

needs to be done the MAKP application for all inpatient room and provide an appropriate reward for nurses that working in the MAKP room and to improve the competence of all nurses (Imelda, M.M., 2011).

The workload of nurses greatly affects the completeness of the documentation of nursing care in Denpasar medical surgical room. The workload is largely classified as high-level category (70%) and 30% were moderate. The incomplete documentation is caused by a high workload and the limited resources available. This study aims to determine the relationship of knowledge, attitude, workload with documentation of inpatient nursing care. The results of research showed that there were 83.3% of nurses had good knowledge with the documentation completeness was suitable and there were 86.4% of nurses had no knowledge with the documentation completeness was not suitable, there were 100% of a positive attitude with the documentation completeness was suitable, there were 88.9% a negative attitude with documentation completeness was suitable. Knowledge and attitudes related to the completeness of the documentation as proof of the responsibility of nurses to the profession. In the multivariate analysis was obtained the most dominant variable related to the completeness of documentation of nursing care was the workload (Mastini P.A., 2013).

Some results of research have been reviewed in several articles showed that increasing the nurse performance in nursing care in hospital can improve patient satisfaction. Performance of the clinic nurse in the service can be improved through the

implementation of MAKP, compliance of nursing documentation and calculation of the workload of nurses according to the level of need and the number of patients.

Clinic nurses can improve optimal performance, when all the conditions maximally championed by various parties, especially the management of the hospital. Therefore, it is necessary to make a tool that can predict the performance of nurses so that existing resources can be tailored to the expected performance so as to guarantee excellent service at the Hospital.

### CONCLUSIONS

Results of the study of literature on research articles that have been carried out on several original articles on the performance of nurses in inpatient general and psychiatric hospitals can be concluded that the performance of good nurses can influence patient satisfaction. The performance of nurses is also influenced by non-nursing workload, so the evaluation of the implementation of nursing care documentation and administrative responsibilities should be carried out periodically. Implementation of MAKP in supporting the existing services in the inpatient unit must be executed properly because it can improve the performance of nurses in service. Implementation of this policy is required to oversee the performance of nurses to realize the excellent service at the hospital.

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# THE INFLUENCE OF PEER GROUP DISCUSSION TO ANXIETY LEVEL OF CLINICAL PRACTICE EXPERIENCE STUDENT FACULTY OF NURSING UNIVERSITAS AIRLANGGA

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## ABSTRACT

**Introduction:** Clinical practice is one of the learning process should be done by nursing student in order to finish their study. Most of nursing student having heavy and medium anxiety during the process of learning practice experience. Anxiety is caused by their lack of knowledge about clinical practice. Peer Group Discussion (PGD) is expected to decrease anxiety of the nursing student during learning practice so they can be professional nurse in the future. **Method:** This research was a quasy experiment with Pre-Post Test Non-Randomized Control Group design. It has 72 nursing students as population with one control group and treatment group using simple random sampling and got 46 respondents. The independent variable was PGD and the dependent variable was level of anxiety in learning practice experience of nursing student in Airlangga University nursing school. Data collection was done by using CARS questionnaire (Covi Anxiety Rating Scale) to measure the level of anxiety. The analysis was done using Wilcoxon Signed Rank Test with significant score  $p = 0.05$  and Man Whitney Test with significant level  $p = 0.05$ . **Result:** The result showed significant effect between PGD and level of anxiety of the learning practice experience student ( $p = 0.000$ ). **Discussion:** In conclusion, PGD have an effect on the level of anxiety on learning practice experience nursing student because there was perception's changes from maladaptive became adaptive. It is expected for future research to make another method such us tutorial or mentoring to decrease anxiety of the nursing students.

**Keywords:** *anxiety, peer group discussion, clinical practice experience nursing student*

## INTRODUCTION

Anxiety is an unpleasant emotion characterized by anxiety, concern and fear that sometimes we have experienced in the different levels (Atkinson, et al, 2008). The study conducted by the Finn, Thorburn, and King (2000), quoted from Syahreni and Waluyanti (2007) found many nursing students who experience anxiety caused by one of the difficulties when dealing with real problems during the learning underwent clinical practice. According to Carlson, Kotze & Rooyen (2003) mentions nursing students experience stress and anxiety with a high level while clinical practice due to their first experience of clinical practice, afraid to make mistakes because of lack of knowledge, lack of support from the nurse's room and the difference between theory obtained in the classroom and in the practice of nursing students. Anxiety on clinical practice is not a new phenomenon, a lot of research that's been done. US Department of Health and Human Services (2009) says in order to cope with anxiety can be done by reducing the internal trigger, namely the cognitive approach is able to change to the source of the anxiety that it faces. According Tampubolon (2002) Peer Group Discussion is a cognitive approach by way of providing information to a group of people who have in common, such as the similarity of age, social status or the same tendency toward something that is talking about a topic of a problem.

Kurebayashi, Prado, and Silva (2012) conducted a study on nursing students at the University of Sao Paulo Brazil and showed students the results of clinical practice experience anxiety were 32.62% and 43.66%

had severe anxiety. Research in Indonesia are carried out by Endah and Desmanarti (2008) obtained from the 1255 nursing students in West Java Health Department 76% experienced anxiety during practice at the Hospital. According to the academic data in the academic year 2013/2014, 364 students of the Faculty of Nursing, University of Airlangga go to hospital for clinical practice. Based on preliminary studies at Faculty of Nursing, Airlangga University showed 74 % (102 of the 138 students) experiencing severe anxiety and moderate.

According to Long (1996) in Laksono (2010) anxiety occurs is influenced by many factors, namely the development of personality (Personality Development), maturational, level of knowledge, characteristics of the stimulus and the individual characteristics. Sharif and Masoumi (2005) also mentioned the cause student anxiety clinical practice are concerns about patient harm students through their lack of knowledge. Based on interviews conducted by the researchers to 10 students causes anxiety occurs in students of the Faculty of Nursing, Universitas Airlangga was 52.5% lack of knowledge about the role and tasks while in hospital, 35% because of the new environment, 12.5% of the task and the lack of guidance from the lecturers.

The transition environment from students role in the classroom to the practitioner will make the student experience anxiety where the participants in the practice of land required to be more independent. Syahreni and Waluyanti (2007) says the success of clinical learning is influenced by the knowledge readiness, mental, emotional and availability of a conducive environment.

Stuart and Sundeen (1998) says the impact of anxiety is related with level of anxiety. Mild anxiety causes a person to be alert and improve learning. Anxiety was going to have trouble concentrating, requires more effort in learning and will override anything else while focusing on one thing. Severe anxiety will lead to a total inability to focus and coping mechanism. According to Hughes (2005) in Moscaritolo (2009) anxiety in students who were clinical practice would interfere with their academic performance due to low coping skills. Beddoe and Murphy (2004) states severe stress and anxiety would interfere with concentration, memory, and ability to solve problems will result in academic results. According to data from the 2012 Academic School of Nursing there is one student who came out of education due to severe anxiety when clinical practice.

## MATERIALS AND METHODS

This study was using quasy experiment design with Pre-Post Test Non-Randomized Control Group Design. The population in this study were 72 students of Faculty of Nursing, Universitas Airlangga who experienced moderate or severe anxiety. Sample were 46 respondents taken by simple random sampling. The independent variables of research was level of anxiety and dependent variabel was Peer Group Discussion. The questionnaire used was CARS (Covi Anxiety Rating Scale). Data were analyzed using Wilcoxon Sign Rank Test with significance level  $p \leq 0.05$  and Man-Whitney statistical tests with significance level  $p \leq 0.05$ .

## RESULT

The study involved 46 respondents, which divide to 26 respondents as treatment group and the control group 26 respondents. Respondents in the treatment group, 57% (13 respondents) are 20 years old, 30% (7 respondents) are 19 years old and 13% (3 respondents) are 21 years old. While in the control group there are 57% (13 respondents) aged 20 years, 34% (8 respondents) aged 19 years and 9% (2 respondents) aged 21 years. The results showed anxiety levels before and after treatment in the table below.

Table 1 Distribution of respondents anxiety level of student learning experiences before and after being given the Peer Group Discussion on Nursing Faculty Airlangga University Surabaya, April 27–May 15, 2015.

No	Anxiety Level	Treatment Group		Control Group					
		Pre		Post					
		n	%	n	%				
1	No Anxiety	0	0	6	26	0	0	0	0
2	Mild	0	0	17	74	0	0	2	9
3	Moderate	16	70	0	0	18	78	18	78
4	Severe	7	30	0	0	5	22	3	13
Total		23	100	23	100	23	100	23	100
<i>Wilcoxon</i>		p = 0.000		p = 0.083					
<i>Mann Whitney Pretest</i>		p = 0.500							
<i>Mann Whitney Posttest</i>		p = 0.000							

Table 1 shows the anxiety level of respondents in the treatment groups before the Peer Group Discussion majority experiencing moderate anxiety (70%) and 30% experiencing severe anxiety. In the control group anxiety level of respondents before the Peer Group Discussion 78%

respondents get moderate anxiety and severe anxiety are 22%. After the Peer Group Discussion is given to treatment group, 74% respondents experiencing mild anxiety and 26% respondents did not experience anxiety. In the control group, 78% respondents still on the moderate level of anxiety, and the other experiencing mild (9%) and severe (13%) anxiety. Wilcoxon test result is showed in the treatment group  $p = 0.000$ , it means there is significant differences in the level of anxiety when the pretest and post-test. Whereas in the control group  $p = 0.083$ , it means that there is no difference in the level of anxiety when pretest and post-test. Mann Whitney test analysis results obtained pretest  $p = 0.500$  means there is no difference in anxiety levels between the treatment and control groups before giving treatment, while the Mann Whitney test analysis results obtained when posttest  $p = 0.000$ , it means that there is the effect of Peer Group Discussion on the level of anxiety study respondents.

Decreased anxiety after Peer Group Discussion given to the students has occurred in all categories of respondents. Significant changes decrease the anxiety from moderate to mild category. Walgito (2003) says Peer Group is one of the characteristics that formed in social behavior which will affect the behavior of the group as well as the behavior of individuals who become members. Through the Peer Group, individuals feel a similarity to one another as the field ages, needs and goals. A group of peers can meet the personal needs of the individual, respect them, provide information, raise self-esteem and give them an identity. Peer Group Discussion makes people be more

open in expressing their problems. In this study, a small group of 11–12 people who already know each other, have relatively the same age, have the same needs and goals and intentionally formed to follow the peer group discussion. The learning process will result in an understanding or cognition. Cognition in a person contains elements of perception, thought, memory, processing and preparation of information (Bastable, 2002).

Peer groups says if the problems that caused anxiety is less concerning rooms used for clinical practice and students role and duties. This is in accordance with the opinion expressed by Long (1996) in Laksono (2010) which states anxiety will happens is affected by several factors, one of which is the level of knowledge. The level of lack of knowledge about clinical practice on students caused them to feel anxious. Peer Group Discussion increase their knowledge through the learning process. This method makes students more convenient because it can discuss with their peers already known. If positive perceptions are formed, then the coping mechanisms will be effective. If the individual has an effective coping mechanism when face the stressors, it will not cause stress (Nursalam, 2007). Pleasant learning process will have a positive impact both in cognitive development. Cognitive development in a positive direction can change student perceptions regarding clinical practice situation. Positive perception about clinical practice will lead to positive coping mechanisms as well. This corresponds to that disclosed by Carlson (1994) in Nursalam (2007) that depends on the individual's coping

abilities. As individually, students will not consider as threat to endanger themselves and the patient, so that anxiety will be reduced. They also know what they need to do to deal with anxiety. So they can perform to the optimal clinical learning and improving their academic evaluation results.

Provision of information facilitated by peer group discussion fits perfectly with the students who are still skeptical and worried about the clinical practice but still reluctant to express it directly. The material is supplied not only about it but also share and solve the problem faced by students which causing anxiety during clinical practice. Through support and share anything, they do not feel embarrassed to share the experience with her friends, is evident all respondents express things what they worry, even in their discussions are able to provide advice and support aimed at reducing anxiety in peers face a problem. The support from peers makes an individual feel if they have friends who pay attention, appreciate them, and the sense of common. Cohen and Wilis (1985) suggest that individuals with high levels of support have a sense of ownership and good self-esteem. Coopersmith (1967) says a person with high self-esteem shows independent behavior, active, courageous, confident and have high self confidence that he was able to control the situation and give positive results. Confidence will be helping students reduce anxiety. The statement in accordance with the opinion of Nevid (2005) if self-confidence is one factor that affects cognitive anxiety individuals.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

Students learning experience before the Peer Group Discussion experience anxiety due to a lack of knowledge and experience of their clinics that will affect an individual's coping process cause feelings of anxiety.

Anxiety student learning experience after the Peer Group Discussion decreased in the treatment group than that experienced anxiety, worry and fear become more calm and know what to do in overcoming anxiety. This is because the individual becomes an adaptive coping mechanism after the learning process that increases the level of cognition of respondents.

Peer Group Discussion decreased the anxiety level of nursing students because it adds the knowledge through the learning process, comfort and fun with a group of peers, learn the process of change will affect their perception into an adaptive coping and reducing their anxiety and support in a group of friends improve confidence and self-esteem of an individual.

### **Recomendation**

Foreducational institutions are expected to provide preparatory material in accordance with the clinical room such as the delivery of information about the characteristics of the room along with a disease that is in the room carefully before and during clinical learning. Peer Group Discussion method can be used as an alternative way of presenting the material in groups and using a facilitator of sister level.



For nursing students are expected to perform Peer Group Discussion before and during clinical practice more often so get the material deeper.

For researchers conduct further research on strategies to reduce student anxiety clinical practice with other methods.

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# PERFORMANCE APPRAISAL WITH 360 DEGREES MULTISOURCE FEEDBACK IN THE CLINICAL SETTING AND NURSING EDUCATION: A SYSTEMATIC LITERATURE REVIEW

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## ABSTRACT

**Introduction:** Nursing services is one of the model systems that require better performance appraisal to evaluate and improve performance. One tool that has gained popularity and has become a growing trend in recent years is the 360 degree performance review. The aim of this study was to identify and define the evidence and the opportunity to develop performance appraisal with multisource feedback or 360-degree method in the clinical area of nursing and education aimed at improving the quality of nursing services. **Methods:** The study integrative literature by using specific search terms in the time frame of five years (2010 to 2015) of EBSCOhost and ProQuest Database. Sixteen of the peer-reviewed journal articles met the inclusion criteria for this review. **Results:** Performance appraisal by using multisource feedback or 360-degree method has a chance to be implemented in the area of clinical and nursing education, such as assessing the performance of health professionals, medical school staff, nurse educators and the practice of students. Moreover, it can also be used to evaluate the trainer, internship and residency practices, determine the productive and unproductive labor. Performance appraisal have a domain that was the knowledge, skills and behaviors. This assessment method was effective for all appropriate aspects, and then can be taken into consideration in the planning of training and skills development. The 360 degree method has evidence feasibility assessment to be used. Validity and reliability on the domain and the performance assessment tool applied should continue to be developed in accordance with the conditions that can be generalized in an organization, it was also an opportunity for research that can be developed further. **Discussion:** The performance appraisal with multisource feedback or 360-degree have the opportunity to be used in the field of nursing that requires a broader assessment of the development domain for all units or specificity in the field of nursing.

**Keywords:** *performance appraisal, multisource feedback, 360 degrees, nursing area*

## NURSE PERFORMANCE TO PATIENTS OF BPJS AND NON-BPJS WITH PATIENT SATISFACTION

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### ABSTRACT

**Introduction:** The complexity of the health problems faced by the people demand the adoption of the National Social Security System in the health sector through the Social Security Agency (BPJS). Stricter regulation of BPJS is feared to impact on behavior change as well as performance degradation overall health workers. Therefore this research was done to explain the correlation between nurse performance for BPJS and non-BPJS patients with patient satisfaction. **Method:** This study was cross sectional approach. Data was analyzed using Spearman Rank Correlation and Mann Whitney U-Test, includes 11 samples of nurses with total sampling as independent variable and 58 samples of BPJS patients and 20 non-BPJS patients with purposive sampling techniques as dependent variable. Data were collected through questionnaires and observation. **Results:** The results of correlation between the performance of nurses with BPJS and non-BPJS patient satisfaction obtains significance level of  $p = 0.003$ , and  $p = 0.004$ ,  $r = 0.791$ , and  $0.800$  respectively, so that H1 was accepted, meaning there was a strong correlations. While using Mann Whitney U-Test obtains significance level of  $p = 0.168$  so that H1 was rejected, meaning there was no significant differences between the level of BPJS and non-BPJS patient satisfaction. **Discussion:** The nurses in Room Internal Disease II (Women's) of Semen Gresik Hospital is expected to retain its good performance in treating BPJS and non BPJS patients.

**Keywords:** BPJS, non-BPJS, satisfaction, nurses performance

## INTRODUCTION

In accordance with the mandate of Article 28, Paragraph (1) Amendment of the Constitution of the Republic of Indonesia Year 1945, it is affirmed that every person has the right to obtain medical care, then article 34 paragraph (3) it is declared that the state is responsible for the provision of decent health care facilities and public service facilities (MoH, 2007). Therefore hospital as a public health care facility is required to provide health services that meet the standards of optimal service. It is as an accountability of a hospital in order to compete with other hospitals in terms of patient care that is comprehensive and plenary, including aspects of promotive, preventive, curative and rehabilitative services as well as public health referral center. When these elements are ignored, then in the not too distant future the hospital will lose patients, because the patients will switch to other hospitals which can provide more satisfactory service. This is important because the patient is a valuable asset in a hospital industry (Anjaryani, 2009). The complexity of the health problems faced by the people demands enactment of a National Social Security System in the health sector through the Social Security Agency (BPJS). With the enactment of Act No. 24 of 2011, then on January 1, 2014 the public health insurance (JKN) is administered by Social Security Agency of Health Affairs (BPJS Kesehatan). Based on past experience and the experience of other countries, then the system is appropriate for managing health care subsystem parallel with health financing subsystem through BPJS Kesehatan. The national health insurance system will have an

impact on fundamental changes to service standards, service rate standard based on the correct calculation, structuring the formulary and rational use of drugs that impact on quality and cost control (MoH, 2006). For private hospitals and doctors, BPJS concept makes such a cross roads. Concerns about the loss or decline in profit when serving BPJS patients, medical concerns against capitation, if they do not serve well they worry about losing patients because all the patients are participating in BPJS (Abshor, 2013). This system is feared to impact on behavior change or a decrease in overall performance of health workers (Amelia, 2014). Preliminary studies on the performance of nurses in Room Adults II (Women's) of Semen Gresik Hospital, based on observations of data at Trimester I (September 2013 to February 2014) resulting in good performance during this time. But until now the performance of nurses to patients of BPJS and non-BPJS in relation with patient satisfaction is still unknown.

Research conducted by Quality Agency of Yogyakarta (DIY) presents the results of a patient satisfaction survey on health insurance, especially *jamkesmas* that is subsidized by the government, of more than 600 patients of health insurance card holders (varieties include Jamkesda, Jamkesos, Jamkesmas), 44 hospitals (government, private, educational, non-educational), 121 public health centers (puskesmas) and 54 BPS in the province shows the results where 95% of respondents were satisfied with the service. If explored further, the lowest level of patient satisfaction is on the cost and administrative related (each less than 70%). Results of Wirawan research (2007) about the level of hospitalized patient

satisfaction on the performance of nursing at a hospital in East Java showed that only 17% of all inpatients who say satisfied with the performance of nursing, while 83% are not satisfied. The main complaints of patients on the performance of nursing is the lack of communication of nurses (80%), lack of attention (66.7%) and less hospitable (33.3%). In Semen Gresik Hospital especially in Room Adults II (Women's) performance figures in 2014 during the first trimester are in the average between 77–80 and in the excellent category, while the rates of patient satisfaction decreased in the first quarter 2014 to 70.0% due to the attitude and lack of attention of nurses and the speed of arrival when needed, with each stated figure showed 67.5%, while in the Fourth Quarter 2013 was 72.26% (KMKP-RSSG, 2014).

The nurse gives big influence to determine the quality of service. The nurses act as a spearhead in terms of service to patients and their families at the hospital, because the frequency of encounters with patients is most often. In providing patients care, nurses are influenced by their characteristics. A nurse must consider the characteristics possessed by the patient in determining patient satisfaction, among others; age, sex, education, income or job that may be making the situation of services provided by different nurses, because the patient may have had different expectations. To the type of illness of patients, as a reference in the approach to treatment of patients (Anjaryani, 2007). A service is considered good by the patient, defined by the fact whether the performance provided by nurses can meet the needs of the patient by using the

patient's perception of the service received (satisfactory or disappointing). Satisfaction starting from the reception of patients from the first time of arrival to the time the patient leaves the hospital. The impact of behavior change is perceived by the patient as a health care customer. As a result, some health insurance participants have to experience long waiting time, verbal abuse, are not examined physically and discrimination than rich patients or patients who are not participants of health insurance. In addition, due to the national health insurance scheme, the payment of claims is often delayed. As a result, providers prefer to serve patients who can pay cash immediately after treatment.

## METHOD

This study uses cross sectional design conducted in Room Internal Disease II (Women's) Semen Gresik Hospital beginning from 1 to 31 October 2014. The population of this research was the respondents who underwent hospitalization which consist of 97 respondents.

The sampling technique is total sampling for nurse respondents and purposive sampling for patient sample respondents. The sample size in this study were 11 nurse respondents and 78 patient respondents, in accordance with the specified inclusion criteria. In this study, the independent variables include: the independent variable is the performance of nurses while the dependent variable is BPJS and non-BPJS patients' satisfaction.

Data collection in this study is obtained through observations of nurses and patient satisfaction questionnaire. Data that has been shaped ordinal processed and analyzed

using Spearman Rho test with significance value of  $\rho < 0.05$ .

## RESULT

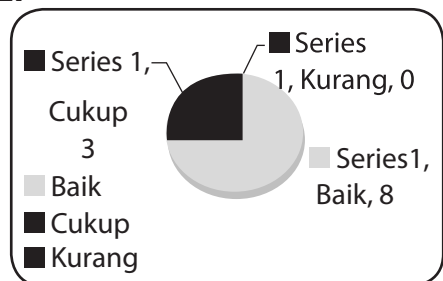


Figure 1 Pie diagram showing distribution of respondents by Performance of Nurses in Internal Disease II (Women's) Inpatient Care Unit Semen Gresik Hospital in October 2014

Table 1 Patient Satisfaction BPJS in Internal Disease II (Women's) Semen Gresik Hospital in October 2014

No	Value	BPJS patient satisfaction
1	Very Satisfied	16 80%
2	Satisfied	4 20%
3	Less Satisfied	0 0%
4	Dissatisfied	0 0%
Total		20 100%

*Sig (2-tailed): 0.003*      *Correlation Coefficient: 0.791*

Table 2 Non-BPJS Patient Satisfaction in Internal Disease II (Women's) Semen Gresik Hospital in October 2014.

No	Value	Non-BPJS Patient Satisfaction
1	Very Satisfied	40 69%
2	Satisfied	18 31%
3	Less Satisfied	0 0%
4	Dissatisfied	0 0%
Total		58 100

*Sig (2-tailed): 0.004*      *Correlation Coefficient: 0.785*

Table 3 BPJS and Non-BPJS Patient Satisfaction in Internal Disease II (Women's) RS Semen Gresik in October 2014.

No	Value	BPJS Patient Satisfaction	Non BPJS Patient Satisfaction	Total
1	Very Satisfied	16 (80%)	40 (69%)	56 (72%)
2	Satisfied	4 (20%)	18 (31%)	22 (28%)
3	Less Satisfied	0	0	0
4	Dissatisfied	0	0	0
Total		20 (100%)	58 (100%)	78 (100%)

*Sig (2-tailed) : 0.168*      *Z : -1.379*

## DISCUSSION

Based on the analysis in Figure 3.1 it can be explained that the majority (73%) of nurses performance is good and none (0%) of nurses is lacking performance.

According to Moehariono (2009) in Anjaryani (2009) performance is an overview of the level of achievement of the implementation of a program of activities or policies in realizing the goals, objectives, vision, and mission of the organization which is poured through an organization strategic planning.

From reality and theories above it can be concluded the higher the person's level of education the better the performance of nurses. Also, the employment status that the majority (55%) are permanent employees, wherefor a permanent employee, responsibility and a sense of belonging in a nursing service activities has become a strong determination. That makes the value of the performance of nurses in Internal Disease II (Women's) is good. For the performance

of nurses who has lower value, a study is conducted by the researcher, and the results are lacking in terms of discipline and creativity by the nurses.

Based on the results of statistical analysis using the Spearman Rank Correlation indicates the level of significance  $p = 0.003 < \alpha$  (0.05) which means that there is a relationship between nurse performance for BPJS patients with patient satisfaction in Internal Disease II (Women's) Semen Gresik Hospital. The degree of strength of the relationship is 0.791, meaning a strong correlation.

Satisfaction according to Kotler (2000) defines satisfaction as *satisfaction is the level of the person's felt state the resulting from comparing a products perceived performance or out come in relation the person's expectation*, meaning that the level of feelings of someone after comparing the performance/product received or the results that are connected with one's expectations. From the theory above it can be concluded that the higher the performance achieved by nurses, it will be the better in providing care for patients, and it could impact on increasing patient satisfaction. To improve the performance of nurses, it should always instilled that work must be according to standards set by the management of the hospital, whether for non-BPJS or BPJS patients with no discrimination.

Based on the results of statistical analysis using the Spearman Rank Correlation indicates the level of significance  $p = 0.004 < \alpha$  (0.05) which means that there is a relationship of nurse performance in patients with non-BPJS patient satisfaction in Internal Disease II (Women) Semen Gresik Hospital. The degree

of strength of the relationship was 0.785, showing a strong correlation.

According to Wirawan (2007) about the level of patient satisfaction on the performance of nursing at a hospital in East Java showed only a small proportion of all inpatients who say satisfied with the performance of nursing, while most states are not satisfied. The main complaints of patients on the performance of nursing are lack of communication of nurses, lack of attention and lack of personnel hospitality.

From the above theory it can be deduced that if the elements in a predetermined patient satisfaction has been achieved, it can be ascertained nurse performance is good, because the higher a person's education level, the demand for nurses performance is also higher. To further improve the performance of nurses in Semen Gresik Hospital, the management has decided if occupancy is always good and no patient complaints about nursing care is given, the management will give a good assessment and support for nurses' career development opportunities.

Based on the results of statistical analysis using the Mann Whitney test shows the level of significance  $p = 0.168 \geq \alpha$  (0.05) and  $Z = -1.379$  so that  $H_1$  is rejected, meaning that there was no significant difference in the level of patient satisfaction between BPJS and Non BPJS on the performance of nurses in Internal Disease II (Women's).

To face the BPJS policy, an agency must prepare a strategy and policy to control costs while maintaining the principles of excellent service, namely welcoming and friendly attitude, full attention to the patients, and the action that meet the needs



of patients and capable of responding to patient complaints in a professional manner (Anjaryani, 2007). Efforts are made to maintain the quality of service at the Semen Gresik Hospital that in providing services to patients of BPJS and non-BPJS shall be the same and not discriminating (Dewantara, 2010) and must correspond with service standards which is serving patients whole-heartedly.

Research results for BPJS patients in hospital services is slightly different which show clearly that there is no differences in the performance of nurses serving patients in both BPJS and non-BPJS, so the satisfaction of both are almost the same, because the expectations of management of the hospital, that all patients must be served according to the standards for both BPJS and non-BPJS patients. The highest level of patient satisfaction of BPJS patients in the recapitulation of 5 Dimensions of Quality (Parasuraman) is satisfaction in Tangible (Appearance). While for non-BPJS patients, the highest satisfaction score is for Responsiveness.

## CONCLUSION

There was a strong relationship between the performance of nurses to BPJS and non-BPJS patients with patient satisfaction in Internal Disease II (Women's) Semen Gresik Hospital.

There was no significant difference between BPJS and Non-BPJS patient satisfaction on the performance of nurses in Internal Disease II (Women's) Semen Gresik Hospital.

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# COMPLIANCE WITH STANDARD PRECAUTION AMONG NURSES: A LITERATURE REVIEW

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## ABSTRACT

**Introduction:** Infections in health care services represent a global problem and are still a problem faced by developing countries. Nurses may acquire an infection during the provision of nursing care because of occupational exposure to micro-organisms. Standard Precautions have been introduced as a means to protect health professionals from exposure to pathogens. Its aim was to identify the nurses' compliance with standard precautions in clinical settings. It also identifies factors affecting compliance with guidelines of infection control. **Method:** The data bases were used to identify and locate the literature available on compliance with standard precaution among nurses: MEDLINE database, CINAHL, ProQuest and the British Nursing Index. **Results:** Most of the research reports that, compliance with Standard Precautions was suboptimal among nurses. The factors affecting compliance with standard precaution were forgetting, lack of knowledge, distance from sink, skin irritation, lack of materials and lack of regular continuous education training on infection control practice. **Discussion:** Compliance with standard precautions is suboptimal and inconsistent practice among nurses in clinical settings and a wide range of improvements is needed. The major reasons for noncompliance to standard precautions is unavailability of the equipments and lack of regular continuous medical education on infection prevention.

**Keywords:** *nurses' compliance, standard precaution, infection prevention and control*

## A LITERATURE REVIEW: NURSE'S COMPLIANCE WITH STANDARD UNIVERSAL PRECAUTIONS

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### ABSTRACT

**Introduction:** Hospital acquired infections (HAIs) have been reported to be a serious problem in the safety of patients and health care workers (HCWs). Health care workers, especially nurses, are a high risk group that can be easily contacted with bacteria or virus through blood and body fluid contaminations during medical procedures. Nurses deal with patients directly and more frequent compared to other health professionals. In addition, nurses can also become a mediator of infectious agents between patients and other health care workers. Nurse compliance with standard universal precaution is indispensable in order to reduce the risk of exposure to blood and body fluids so that the risk of being infected with pathogenic microorganisms can be minimized. **Method:** This study was a literature review. Database from ProQuest, Elsevier, ScienceDirect, SAGEPUB, PUBMED, and GOOGLE SCHOLAR were used to identify the eligible articles. Articles from January 2010 to October 2014 were used by combining several terms and keywords of "standard precautions", "universal precaution", "Hospital Acquired Infections (HAIs)", "Health Care Worker (HCW)", "compliance", "awareness" and "nurse". Fifteen related literatures were obtained. **Results:** Nine literatures showed a good adherence by nurses in implementing universal precaution, especially in the use of gloves while doing medical procedures and changing gloves for each patient. Non-compliance nurses with standard universal precaution was identified by not using eye gear (goggles) and apron because of discomfort. **Discussion:** Nurse's knowledge about universal precaution and the effects has a significant contribution in building nurse's awareness and compliance.

**Keywords:** *compliance, nurse, standard precaution, universal precaution*

# THE EFFECTIVENESS OF CUCUMBER JUICE AND ROSELLA TEA ON BLOOD PRESSURE LEVEL OF ELDERLY WITH HYPERTENSION

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## ABSTRACT

**Introduction:** The elderly is an age group that susceptible to suffer chronic illness, such as hypertension. This disease is classified as a silent disease because it often occurs without symptom. Hypertension can be treated by medical and non medical ways. Medical treatment for hypertension can be done by a medical doctor and/or the other medical workers, while non-medical treatment can be done through a traditional way or by using herbal, such as cucumber juice and rosella tea. The purpose of this research was to identified the difference of effectiveness of cucumber juice and rosella tea on blood pressure level in elderly with hypertension. **Method:** This was a pre-experimental research with static group comparison design that was conducted on May 25<sup>th</sup>–June 07<sup>th</sup>, 2014. The research population was elderly with hypertension who got pharmacology therapy beta-blockers in Posyandu Lansia Anggrek, subdistrict Pangkur, Ngawi, East Java. There were 26 respondent taken using total sampling technique. Independent variable was cucumber juice and rosella pour while dependent variable was blood pressure level. The datas were analyzed using Paired T-test and Independent T-test with level of significant = 0.05. **Result:** Independent T-test showed there was a significant difference of effectiveness of cucumber juice and rosella pour ( $p = 0.001$ ). **Discussion:** According to the result, cucumber juice could lowering blood pressure level because it content is diuretic. In other hand, rosella tea contains anthocyanin and flavonoids which are useful for lowering blood pressure level. People should know more about the benefit from herbal treatment such as cucumber juice and rosella tea which can lowering blood pressure, especially for the elderly.

**Keywords:** *cucumber juice, rosella tea, blood pressure, hypertension, elderly*

## ANALYSIS OF RISK FACTORS FOR BENIGN PROSTATIC HYPERPLASIA (BPH) INCIDENCE IN RATU ZALECHA HOSPITAL OF MARTAPURA

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### ABSTRACT

**Introduction:** Benign Prostatic Hyperplasia (BPH) is the most common prostate disease in older men. BPH usually becomes more of a problem over time and the symptoms get worse if they are untreated. This study aimed to analyze the risk factors for BPH incidence in Surgical Polyclinic of Ratu Zalecha Hospital of Martapura. **Method:** This was a case control study including 52 patients diagnosed with BPH. This study evaluated categorical data on family history, age, smoking, alcohol use and dietary fiber consumption. The data were analyzed with chi square and multiple logistic regression. **Results:** Risk factors for BPH incidence were age ( $p = 0.026$ ), family history ( $p = 0.039$ ) and smoking ( $p = 0.031$ ), while alcohol use ( $p = 0.101$ ) and fiber consumption ( $p = 0.569$ ) were not related to BPH. Older age ( $> 60$  years old) had 4.8 times higher risk of BPH ( $OR = 4.872$ ,  $95\% CI$ ,  $p = 0.017$ ). **Discussion:** Age, family history, and smoking were significant risk factors for BPH. Risk reduction messages should address this factors, especially among Banjarese people of Martapura, South Borneo.

**Keywords:** *Benign Prostatic Hyperplasia (BPH), risk factors, Martapura*

# THE EFFECTIVENESS OF DRINKING MEDICINE MONITORING BY FAMILIES TOWARDS COMPLIANCE OF DIRECTLY OBSERVED THERAPY SHORTCOUSE PROGRAM (DOTS) IN TUBERCULOSIS PATIENTS

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## **ABSTRACT**

**Introduction:** Tuberculosis (TB) has become an important health problem in the world for a long time and up to this day it is still difficult to be controlled. Prevalence of TB in Indonesia is still very high in which this country positioned the fifth largest number of TB cases incident in the world (WHO, 2010) with one of the causes of non-compliance treatment of patients with TB that affect threat cases Multi Drug-Resistant TB (MDR-TB) and Extreme Drug-Resistance (XDR). This behavior can be caused by swallowing the drug ineffectiveness supervisory role (PMO) where most of appointment geared to family members rather than health workers. The purpose of this literature review is to explain the effectiveness of the supervisory role of taking medication to compliance DOTS program in lung tuberculosis patients. **Method:** The strategy for search research article is using the research article in Indonesian and English in accordance with the desired topic by using a data base that is easily accessible and recognized quality, among others: ProQuest, Google Scholar, Ebsco, journals nurses, and portal Garuda. Literature review was limited from 2005 to 2015. The determination of the critical questions and keywords using techniques PICO framework. Keywords used to find this article are Tuberculosis, adherence, DOTS, Treatment Observer Role of Family Members,

family support, Prevention of TB, TB treatment. **Results:** Literature review took 17 journal articles between 2005 and 2015. **Discussion:** The conclusion of this literature review is the role of the supervisor to take medication is very effective in improving the compliance to run the DOTS program in patients with pulmonary tuberculosis. Implications in nursing practice that can be done is to increase the supervisory role of the family to take medication to improve treatment compliance of TB patients. Supervisory Role in Drinking Drugs derived from a family member needs special attention in setting health policy, particularly in the DOTS policy because family members have an understanding that is not always similar to health professionals. In order to improve the effectiveness of Supervisory Role in Drinking Drugs (PMO) the elections of PMO coming from a family member can not be determined in general, but must have certain criteria that could help health workers in selecting worthy PMO for TB before treatment OAT concerned. Information about the disease can also be given to support patient compliance in running therapy and improve the regulatory knowledge to take medication so it will be in line with the established policy.

**Keywords:** *tuberculosis, DOTS, supervisory role in drinking drugs*



## INTRODUCTION

Tuberculosis (TB) has become an important health problem in the world for a long time and up to this day it is still difficult to be controlled. The estimation in 2008 stated that there were 9.4 million new case incidents of TB occurred in the world, in which 55% came from the Southeast Asia. Although the actual TB disease can be cured and the current estimate of world TB cases are slowly declining reached 140 per 100,000 population in 2008, this infectious disease still ranked eighth leading cause of death in countries with low and middle per capita income and rated the third cause of death of people aged 15-59 years after HIV and ischemic heart disease (WHO, 2010).

In Indonesia, TB disease has become one of the national spotlight. Of the five countries with the largest number of TB cases incident, the country occupies the fifth position after India, China, South Africa, and Nigeria (WHO, 2010). Meanwhile, according to data from Health Research (Riskesdas) 2007 states that this disease is the number two cause of death in all age after stroke (MOH, 2007). The prevalence of the Indonesian population diagnosed with TB by health personnel in 2007 and 2013 is not different (0.4%). (Riskesdas, 2013)

Directly Observed Therapy Shortcourse (DOTS) is the strategy that has been carried out in order to make efforts to control TB from spreading, endorsed by WHO since 1995 (MOH, 2007; WHO, 2010). One of the DOTS strategy of TB treatment is accompanied by direct supervision is very closely related to directly improve patient medication adherence TB. Supervision is done in order

to ensure compliance of TB patients remain awake until the schedule is complete treatment in the hope of curing the patient, prevent death, prevent recurrence, break the chain of transmission and prevent resistance to the Anti Tuberculosis germs (OAT) (MOH, 2007b).

Based on the WHO Global Report of 2009 and the Data Riskesdas Year 2010 was up to this time Tb disease is difficult to control in Indonesia despite the implementation of DOTS has been done. Refer to the WHO Global Report of 2009 states that the prevalence of all TB cases in Indonesia is 244/100,000 population (MOH, 2010). The latest development according to data obtained Riskesdas In 2013 the prevalence rate from 2007 until 2013 there has been no decline, with a prevalence of approximately 0.4%. See comparison of both data obtained by the fact that there is still an increase in the prevalence of TB in Indonesia from 2007 to 2013 despite the implementation of the DOTS strategy has been pursued at that time.

Home care such as nursing home environment, monitor treatment, nutrition and rest, as well as special care on the symptoms felt is one of the important things that can affect the cure rate of patients with pulmonary tuberculosis (Yuliana, 2007). The better treatments done at home the faster patient recovery time, so that treatment failure, infection, and the disease can be prevented further. Pulmonary TB disease is not only treatable or preventable through immunization, but there are other factors that can increase the cure rate among other factors from the patient's own such regularity

and compliance in taking the medications and external factors one of which is information related to tuberculosis.

With the increasing number of cases of tuberculosis treatment failure in Indonesia it will be able to trigger the Multi Drug-Resistant TB (MDR-TB) which will threaten the efficacy of standard alloy Anti-Tuberculosis Drugs (OAT) first-line TB germs that caused resistance to the treatment alloy standards (PPTI, 2010). Globally estimated to have occurred half a million cases of MDR-TB in 2007 (WHO, 2010d). Due to MDR-TB, patients are required to receive a second-line treatment which costs required to be more expensive for a period longer than the previous standard treatment (Aditama 2006 in Nazlya, 2012). In addition to MDR-Tb turns out there is an even greater threat, namely Extreme Drug-Resistance (XDR) TB is MDR-TB germ that is also resistant to three or more second-line drugs that XDR-Tb be the most worrying cases.

The existence of the problems in society such as the threat of MDR-TB and XDR-Tb make everyone should be aware of the importance of creating and maintaining compliance with treatment for TB patients to complete treatment and eventually recovered. One way is to increase the effectiveness of the performance of the Supervisory Swallowing Drugs Tuberculosis (Tb PMO) as those closest to the patient directly associated with Tb and Tb treatment activities. Therefore the role of the supervisor is very necessary to take medication and improved so that patient compliance TB in running therapy can be enhanced and work well.

## METHOD

The search strategy research article is using the research article in Indonesian and English in accordance with the desired topic by using a data base that is easily accessible and recognized quality, among others: ProQuest, Google Scholar, Ebsco, journals nurses, and portal Garuda. Literature review was limited from 2005 to 2015. The determination of the critical questions and keywords using techniques PICO framework. Keywords used are Tuberculosis, adherence, DOTS, Treatment Observer Role of Family Members, family support, TB Prevention, Treatment Tb. During the search, the article obtained in the tens of articles. The number of articles that appeared due to pulmonary TB articles about very much. After sorting obtained 17 articles that approach the topic discussed. Furthermore, the article reelected based on inclusion criteria based PICO frame work (P: all the patients are either healthy or sick, I: Role of Oversight Take medications by family, O: Compliance Taking medicine pulmonary TB patients). Total corresponding article are 17 articles and presented in appendix table.

## RESULTS

**Research article** that examined seventeen of research using a variety of research methods ranging from good randomized controlled study, correlation study and description.

Research conducted by Norgbe, Smith & Toit, in 2011 regarding compliance DOTS TB patients. The study was conducted with a descriptive approach correlation with the number of respondents as many as

130 respondents, the result that there is a significant relationship between knowledge and perception of compliance run the program DOTS TB patients. This is supported by research conducted by Kisambu J., Nuwaha F., Sekandi J.N., (2014) about Adherence to treatment and supervision for tuberculosis in a DOTS program Among pastoralists in Uganda. Result a total of 126 TB patients and an equal number of community volunteers were enrolled in the study. Medication adherence and supervision were estimated at respectively 72% and 63%. Independent predictors of medication adherence were perceived drug side effects (adjusted odds ratio [aOR] 5.0, 95% CI 1.86–13.6), running out of drugs (aOR 5.97, 95% CI 2.27–15.70) and DOT card is not filled in (aOR 6.65, 95% CI 2.08–20.66).

**Conclusion:** Adherence Among pastoralists is less than optimal due to poor institutionalisation of the DOTS strategy in a pastoralist community. Results of this study are Also consistent with studies conducted by Das R., Baidya S., Das J.C., Kumar S., (2015), stating that the study showed good adherence to the regimen among patients pulmonary tuberculosis in spite of being a difficult, areas. Also it may help in the planning and implementation of tuberculosis control measures by addressing and overcoming the barriers regarding treatment completion.

Research conducted by Yekrang Sis H., Jannati A., et al., (2014), the present study Compared to the effectiveness of Family-Based DOTS (FB-DOTS) versus Professional-Family Mix DOTS (PFM-DOTS) in smear positive tuberculosis (TB) patients. **Results:** The difference for sputum smear negative

(culture) was 16.2 (4.8%) and 7.7 (6.9%) for the PFM-DOTS in comparison with FB DOTS by the end of the second and forth months of treatment, respectively. A significant difference was observed between the two groups in relation to knowledge, satisfaction (patients and supervisors) and all four domains of quality of life: physical health ( $P = 0.036$ ), psychological health ( $P < 0.001$ ), social relations ( $P = 0.026$ ) and environmental health ( $P < 0.001$ ). **Conclusion:** The PFM-DOTS treatment strategy in the which health experts follow the patients in their homes seems to be among most appropriate strategies in treating TB.

PMO role carried out in two stages, currently taking medication and treatment assistance reset to the clinic but in this study will be discussed further is reset to the clinic for treatment assistance. The activity is assistance efforts given a PMO when accompanying patients Tb meet the schedule set forth in documents such as the health center took supplies OAT and recheck phlegm. Based on the results of the study indicate a significant relationship between the variables reset to the clinic for treatment assistance with patient treatment compliance Tb. Results of this research turned out to be consistent with some previous research which claimed that it was indeed the existence of Trustees Drink Drugs (PMO) is scientifically proven to have a significant association with TB patient treatment compliance (Aisha, 2002; Arwida, 2011; Darmawan, 2002; Istiawan, 2005; Wirdani, 2001). PMO especially coming from family members proved capable of giving effect to the patient treatment compliance Tb (Manders, et al., 2001; Widagdo, 2003)

because the family create a climate that is more comfortable for the patients themselves. Besides, the research conducted by Parida A., (2014), Comparison of Directly Observed Treatment Short Course (DOTS) with Self-Administered Therapy in Pulmonary Tuberculosis. The results prove that DOTS is still one program to be an effective treatment for patients with pulmonary tuberculosis.

Research conducted by Chang AH (2013), about House calls by community health workers and public health nurses to improve adherence to isoniazid monotherapy for latent tuberculosis infection: a retrospective study. Result home-based follow-up of LTBI patients taking isoniazid was associated with improved treatment completion and no increase is in adverse effects Regardless of patient characteristics or the prescribed duration of INH therapy. These results are also consistent with research conducted by Rochani Istiawan; Junaiti Sahar; Adang Bachtiar (2006) with a correlative descriptive method with cross sectional approach which aims to determine the relationship of the supervisory role of the family and take medicine by health workers to knowledge, behavior and compliance of clients tuberculosis prevention study was conducted in all health centers Wonosobo regency. The number of samples that meet the criteria of 72 clients who supervised PMO TB family 46 people and supervised health workers 26 people. The results obtained indicate that the role of the PMO by a family relationship with a client TB prevention behavior showed a strong relationship and patterned positive. The higher the PMO role of the family, the higher the client's behavior

prevention of tuberculosis.

Research conducted by Thiam, et al., 2007, about the effect of counseling through therapeutic communication between the patient's health workers towards patients with TB DOTS program. This research was conducted with the approach of randomized controlled trial consisting of treatment and control groups. Treatment group was given counseling through effective communication about treatment therapies that will run for 8 months, while the control group only get the usual procedure. The results showed that the intervention group had improvement in running therapy adherence compared with the control group. In line with this study, a study conducted by Tachfouti, et al., 2012 to 290 TB Patients (85 defaulters and 205 controls), in which the intervention group was given assistance for two months in therapy, while the control group only regular therapy without accompaniment, the result showed that the intervention group demonstrated knowledge and a better activity than the control group.

Research on the effectiveness of psychosocial support to increasing the success of therapy in TB patients conducted by Kaliakbarova, et al., in 2013, with the approach of the 228 patients randomized controlled considered to be at high risk of treatment default, divided into 2 groups: intervention and treatment. The intervention group get psychosocial support programme (PSS) while the control group only get the usual treatment procedure. The results showed that the psychosocial support program in TB patients may increase treatment success. It is also in line with research conducted

by Bediang, et al., 2014, with the approach randomised controlled multicentre study on 260 participants, where the intervention group receive a notification via SMS about the treatment of TB or DOTS program, while the control group only underwent the usual procedure without warning through SMS. The results show that the program notification via SMS about DOTS programs can improve compliance in running DOTS program, compared to the control group.

In 2005, research conducted by Simon L, et al., 2005, with the quasy experimental approach, with 1200 respondents consisting of control and treatment groups. In the treatment group was given about staff training and ambulatory tuberculosis treatment, while the control group of normal therapy. The results show in the intervention group occurred success increasing of treatment programs by 4.8%. This research may also be supported by the results of research conducted Dwidiyanti, 2014, on the effectiveness of the action SOWAN (Supporting, Observation, Well-being, Action and Nursing) in patients with pulmonary TB, the results showed that supporting therapy has a significant influence on the independence of physical, psychological, social and spiritual pulmonary TB patients.

Research conducted by Fitri Risma Conservation, et al., (2012) on Information Needs Assessment Home Care In pulmonary TB patients at health centers Cimahi Melong Asih. Results of research in 45 respondents indicate the level of information need be known that the highest is tuberculosis treatment-related information (100%), where information on drug dose (88.89%) and

management take medication (84.44%).

### **Implications for Nursing Practice**

The review of the above study provides scientific evidence that DOTS is an alternative policy solutions that are effective for controlling TB disease until now. In order to improve the effectiveness of the role of the Supervisory Drink Drugs (PMO) then when elections are coming from a family member can not be determined in general, but must have certain criteria that could help health workers in selecting worthy PMO for TB before treatment OAT concerned. Based on the review of several studies to obtain information about a modeling PMO election of members of the family, which is said to effectively contribute to tuberculosis treatment compliance if the commitment PMO role combined with a good level of knowledge and familial ties PMO and TB patients are quite close. This modeling is one way of determining who should be appointed to be the PMO for TB patients if the ultimate goal is to support the TB patient treatment compliance.

In addition, implementation of health policies that can work well it is necessary to consider the situation and development of the economic, social and cultural rights in their respective areas. Particularly in Indonesia, with an overview of the geographical location consists of islands and sea, economic background that most patients come from poor families, as well as the background of ideological, social and cultural are very thick with religious and family so it is possible there will be many derived PMO from family members than from

others. To that end, based on the study of this article, the role of the PMO who comes from a family member needs special attention in setting health policy, particularly in the DOTS policy because family members have an understanding that is not always the same with health professionals.

The need for information is also very need to be developed by health professionals, especially nursing the importance of conveying information about the treatment to TB patients. Likewise, the supervisor who has been designated to take medicine, health education is very important given that what has been programmed by the health workers can run properly in its capacity as supervisor in patients taking anti-tuberculosis drugs.

## CONCLUSION AND RECOMMENDATION

### Conclusion

The conclusion that can be drawn from this literature review article that the supervisory role by the family to take medication proven effective in improving medication adherence anti-tuberculosis (OAT) in patients with TB. Besides, DOTS is an alternative policy solutions that are effective for controlling TB disease until now. In order to improve the effectiveness of the role Pengawss Drink Drugs (PMO) PMO then when elections are coming from a family member can not be determined in general, but must have certain criteria that could help health workers in selecting the PMO are eligible for the concerned TB patients before treatment Anti Tuberculosis (OAT).

### Recommendation

As for suggestions that can be delivered include:

1. Selection of the PMO should be directed to a family member who has a close relationship with TB patients and were able to re-treatment guidance to health centers
2. The role of health workers in health centers is essential in order to provide health education to the perpetrators of PMO that supervisory duties Tb treatment can run well
3. Similar research by randomized clinical trial involving more subjects are expected to give an overview of the more important outcomes associated with the supervisory role of taking the medication, the effectiveness of DOTS, the TB patient compliance and its relation to the prevention of transmission of TB programs.

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# THE EFFECTIVENESS OF FOOT REFLEXOLOGY MASSAGE AND HYPNOTHERAPY IN REDUCING BLOOD PRESSURE OF HYPERTENSION PATIENTS

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## ABSTRACT

**Introduction:** Therapeutic of reflexology and hypnotherapy has not been known and developed for nursing implementation in Indonesia. One of the benefits of both therapies is to reduce blood pressure of hypertension patients. This study aimed to know the difference between the effectiveness of foot reflexology massage therapy and hypnotherapy to decrease blood pressure of hypertension patients. **Method:** The study was quasy experiment. The samples in this study were 30 respondents in each group of foot reflexology and 30 respondents of hypnotherapy. Blood pressure was measured by using a sphygmomanometer. The method of analyze data was descriptive quantitative method. **Result:** Statistical analysis with *Mann Whitney U-test* found  $p = 0.000$  and hypnotherapy  $p = 0.001$  showed that  $p < \alpha$ , which means there is a difference between foot reflexology massage and hypnotherapy significantly. The mean rank of reflexology is 40.00 and hypnotherapy 35.50 showing foot reflexology massage is more effective than hypnotherapy. **Discussion:** There is a difference of effectiveness between foot reflexology and hypnotherapy in reducing blood pressure of hypertension patients. Reflexology foot massage is more effective than hypnotherapy in reducing blood pressure of hypertension patients.

**Keywords:** *foot reflexology massage, hypnotherapy, blood pressure, hypertension*

## SELF-EFFICACY REGARDING WITH MOBILIZATION CAPABILITIES IN DIGESTIVE POST-SURGERY PATIENTS

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### **ABSTRACT**

**Introduction:** Post-surgery is a process after surgical that patient often complains about pain and unavailable to mobilize, while mobilize was very important to speed up the healing. The negative words and perceptions in the mind cannot be avoided; it may continue to an emotional distress that may develop into psychological disorder (adjustment disorder) and worse the patient's condition, thus it may decrease self-efficacy. The aimed of this study was to explain the correlation of self-efficacy with ability to mobilize on post digestive operative patients at General Hospital Kaliwates Jember. **Method:** A cross sectional design was used in this study. There were 24 post-digestive operative patients as the population at Kaliwates General Hospital. Total sample was 19 respondents, taken by consecutive sampling according to inclusion criteria. The independent variable was self-efficacy. The dependent variable was ability to mobilize. Data were collected using questionnaire and observation sheet and then analyzed using Spearman Rho Test with level significance of  $\leq 0.05$ . **Result:** The result showed that self-efficacy had correlation with ability to mobilize with ( $p$  value = 0.03 and  $r = 0.637$ ). It showed that there was strong and positive correlation which means that the higher of self-efficacy, the higher ability to mobilize too. **Discussion:** It can be concluded that increasing of self-efficacy was related to ability to mobilize in post digestive operative patients. Further studies should involve larger respondents and better measurement to obtain more accurate results.

**Keywords:** *self-efficacy, mobilization ability, digestive post-surgery*

## INTRODUCTION

Along with the increasing number of surgery, the higher the rate of complications that occur are around 3–16% with a mortality rate of 0.4–0.8% (Weiser *et al.*, 2008). Surgical site infection is one of the largest surgical complications where the results of a study in the UK showed that the surgical site infection extend the average length of stay to 6.5 days (Scottish Intercollegiate Guidelines Network, 2008). Nurses are at the forefront in health care to prevent complications after the surgery. Action has been taken by nurse for the prevention surgical site infection. One of it is mobilizing patients in the post-surgery as soon as possible, but still found that patients still less mobilized. Observations and interviews of 2 patients with post herniorafi in the first day, both of them (100%) proved to have low self-efficacy in mobilizing shown by patients who are still afraid to move and only lying in bed. In this case the patient had previously been given health education during pre-surgery in the treatment room on the kinds and the importance of post-surgery mobilization. If the patient is in the good hemodynamic conditions of post-surgical, they were supposed to be able to mobilize after health education and it can be attributed to the patient's self-efficacy.

Self-efficacy is needed, to make the patient is able to run self-care regimen that has been programmed properly. Excessive fear showed that self-efficacy of patients is still low and is unable to decide the mobilization important for the prevention of complications but the inter-relationship between self-efficacy with the patient's ability to mobilize the postoperative digestive still need to be explained further.

The high rate of complications and death due to surgery led to surgery into a global health concern. Assuming the amount of 3% complication rate and mortality rate of 0.5%, which means that almost seven million patients experienced major complications, including one million people who died during or after surgery per year and the rate of complications following surgery in developing countries is estimated to be much higher at around 3–16% (Weiser *et al.*, 2008). Surgical site infection is one of the complications after abdominal surgery and frequent nosocomial infection in surgical patients. The survey by the WHO indicate 5–34% of total nosocomial infections are surgical site infection and research in Vietnam reported incidence of surgical site infection amounted to 10.9% of 697 patients. Abdominal surgery proved to 4.46 times the risk of surgical site infection (ILO) than other types of surgery (Nguyen & Pung 2001). Digestive abdominal surgery is in the first ranks which done in the General Hospital in Jember Kaliwates beside any other surgery (such as orthopedic surgery) with 112 patients recorded in the period March to August 2014.

Early mobilization is a prominent factor in accelerating the recovery of post-surgical and post-surgical complications can be prevented. The mobilization is very important in accelerating the care and reduce risks due to bed rest as long as the occurrence of pressure sores, stiffness/tension in the muscles throughout the body and blood circulation and breathing is interrupted, also the peristaltic or micturition disorders (Carpenito, 2000). Early mobilization exercises

started from a light above the bed (breathing exercises, exercises effective cough and move the limb) until the patient can get out of bed, walked into the bathroom and walked out of the room (Smeltzer & Bare, 2001).

Post-operative patients with complaints of pain in the area of surgery patients do not want to mobilize with reason to fear loose stitching patients do not dare to change the position. They should have been able to do it because the patients have been given analgesic therapy and education related to the previous mobilization. Words and negative perceptions such as excessive fear, distress or disorder that weakens itself will cause a decrease in self-efficacy because actually someone who has confidence in his ability to conduct activities that support their health in order to achieve the goals and expectations (Tomey & Alligood, 2006).

Haye *et al.*, (2002) found that self-efficacy that either will be able to increase the activity of exercise patients in post-operative, because self-efficacy is a mediator between knowledge and action that are expected to self-efficacy that either the patient more confidence in doing the recovery exercise and activity life such as being able to mobilize after post-surgery can maintain a state of homeostasis and minimize complications that arise as a result of immobilization.

Long immobilization conditions, impact on the length of stay (Waher, Salmond & Pellino 2002). The length of the hospital stay, have an impact on the financial problems the patient, because the longer the treatment, the greater the costs involved and also opportunities for other patients for hospitalization is reduced because of the turn (turn over) patients who

are too long (Folden & Tappen, 2007). The next complications that arise as a result of immobilization were dependence on others, limitations on activities, so that the patient will lose economic resources, which also have a major impact on his life.

A source of self-efficacy in combination of performance accomplishment, vicarious experience, social persuasion, generating emotions (emotional/physiological states) is required with the hope of increasing the confidence of the patient in order to change the perception of non-compliance, inability themselves into confident and capable of organizing and taking further action (Niven 2002). Alwisol (2004) confidence high health are expected to cope with stress and the patient will attempt to achieve a cure is expected or change behavior into behavior so that stress is reduced and self-efficacy of patients will be better so to determine the relationship of self-efficacy with the ability to mobilize, then postoperative complications can be minimized.

## METHODS

The design of this study was a descriptive analytic research with cross sectional approach. The population in this study were all patients with digestive post-surgery from the date of December 3<sup>rd</sup>, 2014 until January 3<sup>rd</sup>, 2015 at the General Hospital in Jember Kaliwates as many as 24 respondents. Samples were 19 respondents. The sampling technique using consecutive sampling and taken based on inclusion criteria of the respondents of this research are: 1) patients who first performed the operation; 2) previously had been given education

about mobilization; 3) types of digestive surgery being; 4) aged 20–60 years; 5) the type of general anesthesia; 6) compos mentis awareness; 7) at least elementary education, and 8) operations planned (elective).

The independent variable in this study was self-efficacy. The dependent variable was the ability to mobilize. Data collection instruments used were questionnaires and observation sheets. Data were analyzed by using the Spearman Rho Test with a significance value of 0.05.

## RESULTS

Patients with self-efficacy is high, 9 of 12 patients sex male, 9 of 11 patients were married, educated high school as well as 11 of the 12 respondents who work as private employees appear to have self-efficacy higher while patients have the ability to mobilize high, 6 of 12 of them sex male, 4 of 5 patients aged 36–40 years, 6 of 11 patients were married, 6 of 10 patients had high school and 7 of 12 patients working as private employees.

Table 1 Cross tabulation self-efficacy in General Hospital Kaliwates Jember

Self-efficacy	Mobilization Capability			Total
	Low	Medium	High	
Low	4 (21.05%)	3 (15.79%)	0 (0%)	7 (36.8%)
High	0 (0%)	4 (21.05%)	8 (42.10%)	12 (63.15%)
Total	4 (21.05%)	7 (36.8%)	8 (42.10%)	19 (100%)
Spearman Rho	p=0.03; r=0.637			

Data above showed that the majority of post-surgical patients have self-efficacy digestive high number of 12 people (63.15%) with the details of the high mobilization capabilities of 8 people (42.10%), while as many as 7 people (36.8%) and low 4 (21.05%), while for respondents who have low self-efficacy Low ability to mobilize as many as 4 people (21.05%), while 3 (15.79%) and high 0 (0%).

Statistical analysis showed correlation study between self-efficacy and ability to mobilize the postoperative digestive using Spearman Rho test showed that significant value of  $p=0.03$ , which means  $p \text{ count} < p \text{ table} (0.05)$  so the hypothesis 1 accepted which means there was a significant relationship between self-efficacy and ability to mobilize the postoperative digestive.

Correlation value  $r = 0.637$ , indicating a strong correlation between self-efficacy and ability to mobilize the postoperative digestive while the direction of the relationship is positive because the value of  $r$  is positive, which means the higher self-efficacy, the higher the ability of mobilization.

## DISCUSSION

Results of this study found a strong positive relationship between self-efficacy with the ability to mobilize. Relationship shows that the higher self-efficacy, the higher the mobilization capability and vice versa. This can be seen in table 1 that 8 of 12 patients with self-efficacy in high level have high level of ability to mobilize. No respondents have poor level ability to mobilize. This was seen in 4 of 7 patients with low level of self-efficacy has low level also in ability to mobilize and no respondents none of which has the high level of ability to mobilize.

This result was in line with theory and previous research that according to Bandura (2006), the processes of self-efficacy affect human function not only directly, but also has indirect influence on other factors. Directly, the process began before individual self-efficacy selecting their choices and starts their businesses. First, people tend to consider, evaluate and integrate information about the capabilities of the secret. First step of the process was not related to the ability to complete a given task. Further evaluation or perception generates expectations for personal efficacy, which in turn determines the decision to display a specific task, some efforts will be made to complete the task, the level of durability that will appear (in addition to the problem), not in accordance with the evidence and the difficulties encountered. Self-efficacy is important because it can affect how people feel, think, motivate themselves and act. Self-efficacy regulates human functioning through four kinds of processes. Different processes (performance accomplishment, vicarious experience, social persuasion, and the evocation of emotions (emotional/physiological states)) are operating jointly on their own self. While the dimensions of self-efficacy which is divided into three first magnitude which focuses on difficulties experienced by each person who definitely different, both generality that focuses on the expectations mastery of the experience of related businesses that have been made, and the third strength that focuses on strength or confidence in doing business.

Weak expectations may be caused by a bad experience, but if someone has a strong

hope that they will keep trying, despite experiencing a failure (Alwisol 2004). Words and positive perception, feeling happy will impact both the driver in order to try to achieve a better quality of life and healthy so as to improve the physical and mental health that will determine the quality of the action to be performed. Repeatedly and constantly actions will be a habit of daily living that determines a person's character. This will determine the character of reality and identity and ultimately determine belief or conviction is beneficial for the mind and self-control of a patient (Subiyanto 2010).

However, the results also show<sup>4</sup> from 12 patients with digestive post-surgery with high level of self-efficacy has medium level of ability to mobilize. It can be seen on the respondent number 3, 7, 9 and 16. These four respondents were male, had secondary education (high school), marital status was married, worked as private employees. This was due to physical factors and mental processes of men considered better and tend to be more confident, psychosocial factors include the stability of marriage or intimate relationship one can influence the behavior of patients, had a job with a salary sufficient to secondary education who are considered influential in the acceptance of information so can improve the patient's self-efficacy, but in this case they have a low average value in the dimensional aspect generality statement item by respondent numbers 13 and 14, which means patients have expectations that weak due to the failure of past experience in this regard has not been assess in depth. Inability to perform a demonstration movement and find it difficult

to do it and the strength and confidence in their ability to conduct a business is not too strong so that the mobilization capability in middle category. This was not in accordance with the opinion of the experts who claim that the higher the patient's self-efficacy, the higher the commitment or involvement to the destination (the ability to mobilize high). It could happen considering the factors or sources that influence self-efficacy of patients through four different processes, namely cognitive, affective, motivational and this selection does not work together so that the evaluation or the perception of generating expectation of self-efficacy personal in determining the decision to display the assignment (election behavior), business motivation, facilitative thought patterns, stress tolerance will be low.

Another thing also happens in this research that 3 patients who have low self-efficacy turned out to be the ability of mobilization were that the respondent number 8, 10 and 15. In the third of the respondents with basic educational background does not cognitively able to receive the maximum information but tend to have attitude more closely follow what is logically considered to be true so that they are able to mobilize the appropriate what is taught by the nurse and the three respondents the two of them widows and widowers who theoretically that psychosocial factors can affect how one defines and reacts to something, with the status of the respondents have more confidence to nurses who teach mobilization in this regard so that the patient is able to mobilize well. Respondents also status does not work, it can affect the patient's desire

to achieve a cure because of economic limitations owned demanding patient to immediately want to recover and get out of the hospital for minimize financial.

It can also be influenced by the dimensions of self-efficacy, the aspect of generality and strength owned patient self-efficacy lower able to provide hope and confidence compared to the level of the difficulties faced by patients so that in practice the rest hope the patient is able to spur patients to mobilize quite well, so indeed lower the patient's self-efficacy due to 3-dimensional aspect that is not balanced. This incident opposite from the opinion of experts that the source of self-efficacy can change the perception of non-compliance, inability to become confident and capable as well as take further action, namely mobilization as part of a therapeutic regimen (Niven 2002).

Self-efficacy in patients with postoperative digestive General Hospital in Jember Kaliwates mostly high among patients with high self-efficacy are males, the age group 36-40 years, married status, high school education and worked as private employees. While the ability to mobilize the digestive postoperative patients at the General Hospital in Jember nearly half Kaliwates high among patients with high mobilization capability is male, the age group 36-40 years, married status, high school education and worked as private employees. There is a strong relationship between self-efficacy with the patient's ability to mobilize the postoperative digestive and towards a positive relationship which means that the higher self-efficacy, the higher the mobilization capability.

It can be used as input for nursing services that can include self-efficacy assessment in the psychosocial factors in pre-surgical and post-surgical patients as the basis to determine planning and nursing interventions. Nursing actions that can be done is to explore about the perception of decision-making, identifying the individual's perception of the risk factors and the inability to take decisions and to identify barriers to behavior change. Nurses are also expected to provide health education need to touch aspects of self-efficacy so that more optimal implementation of health education, nurses also need to develop support for the independence of the patient in doing activities in accordance with the tolerance limits its activities to undertake to support the active role of the family. For further research this result can be used as initial data and also as motivation to develop further research in the scope of basic nursing concerning other factors suspected of affecting mobilization also the dimensions of self-efficacy which has not assess maximally. Further research can modify the shape of the instrument in accordance the cultures of respondents and considered to use a bigger sample.

## CONCLUSION

It can be concluded that increasing of self-efficacy was related to ability to mobilize in post digestive operative patients. Further studies should involve larger respondents and better measurement to obtain more accurate results.

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# PROGRESSIVE MUSCLE RELAXATION (PMR) TO DECREASE ANXIETY LEVELS OF PRE-ANGIOGRAPHY PATIENTS IN RSUD SOEWANDHIE SURABAYA

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## ABSTRACT

**Introduction:** Coronary angiography lead patient to anxiety although they have already received information. Anxiety causes blood vessels constriction, increasing blood pressure, and triggering arhythmia and sometimes angiography must be postponed and should be reschedule because of that effects. Progressive Muscle Relaxation (PMR) is one of the relaxation techniques which is decreasing the anxiousness. This relaxation begin when the muscle contraction then followed by the relaxation. Objective of this study was to analyze the influence of progressive muscle relaxation on anxiety level of preangiography patients in RSUD Soewandhie Surabaya. **Method:** Quasy-experimental design with pre and post control groups, each group consisted of 7 respondents. The independent variable was PMR, and the dependent variable was anxiety level. Data was analyzed by Wilcoxon signed rank test and Mann whitney u test with significance level of  $p < 0.05$ . **Result:** PMR influenced to decrease anxiety level. Wilcoxon signed rank test showed that the intervention group was significantly decrease anxiety levels with the p value 0.015. Mann whitney u test showed that there were differences in anxiety levels in post intervention with p value 0.002. **Discussion:** PMR had influenced to affect the reduction in anxiety levels of patientspreangiografi. PMR can reduce the level of anxiety through the contraction and relaxation of muscles , which stimulates the secretion of endorphins, increased alpha wave activity , and tetha and reduce the activity of beta-2 waves in the brain. Further research is need to do identification dosage of PMR on anxiety levels and should use probability sampling technique to generalize this result.

**Keywords:** *preangiography, anxiety level, progressive muscle relaxation*

# THE EFFECT OF ART THERAPY ON COGNITIVE FUNCTION OF PATIENTS WITH CHRONIC KIDNEY DISEASE (CKD) THOSE UNDERGOING HEMODIALYSIS

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## **ABSTRACT**

**Introduction:** Chronic Kidney Disease (CKD) is one of the chronic disease that have many side effects. One of the problem that can occur is the presence of toxic substances in the brain that will affect the patient's cognitive function. Art therapy is believed to be one of the ways that can be used to optimize cognitive function. The aim of this research was to determined the effect of art therapy on cognitive fuction of patients with Chronic Kidney Disease (CKD) those undergoing hemodialysis. **Method:** This study used a quasi-experimental with pre and post-test control group design. The sampling technique used purposive sampling, twenty six samples were recruited for each group. Data were collected before and after art therapy intervention by questionnaire. Respondents followed 4 sessions of intervention with duration of 30–45 minutes per sessions. Data were analyzed using independent t test. **Results:** The results showed that before art therapy intervention, there was no difference of the cognitive function mean score ( $t = -1.230$ ;  $p = 0.224$ ), and there was difference of the cognitive function mean score after art therapy intervention ( $t = 2.143$ ;  $p = 0.037$ ). **Discussion:** The ability to think is a function of the brain. Art therapy can facilitate alternative pathways in the brain to access and process information that is visual, motor, and memories, thereby enhancing the ability of a person's cognition as a result of the ease in processing information. Based on the results, the researcher resume that art therapy can optimized the cognitive function. Therefore, nurses can play a role as a facilitator to provide art therapy in order to improve the cognitive function in patients with CKD those undergoing hemodialysis.

**Keywords:** *art therapy, CKD, cognitive function, hemodialysis*

# PHYSICAL IMPLEMENTATION OF DIABETIC EXERCISE ON RESISTANCE, ENDURANCE AND IMPROVING GLYCEMIC CONTROL IN PATIENTS OF TYPE 2 DIABETES MELLITUS: A LITERATURE REVIEW

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## ABSTRACT

**Introduction:** Prevalence of diabetes mellitus in Indonesia continues to grow and is estimated to reach 366 million by 2025. Diabetes mellitus type 2 patients tend to be more difficult to control blood glucose levels due to an unhealthy lifestyle. Controlling glucose levels can be achieved by self motivation and physical exercise in various models. The aimed of this study was to examine the literature, journal articles, and research related to exercise for type 2 Diabetes Mellitus. **Method:** This is a literatur review. Data was collected through search engines such as Ebscohost, Pubmed, and Springerlink by keywords. Totally 37 journals have been found then grouped based on characteristic of the inclusion and exclusion criteria. **Result:** There were 8 articles met criteria. Most studies stated that from some diabetic exercises, aerobic exercise is a model that is most effective in controlling glucose concentrations and prevalence of hyperglycemia in patients with type 2 diabetes mellitus. **Conclusion:** The use of the aerobic exercise intervention in type 2 diabetes mellitus in controlling glucose concentrations and prevalence of hyperglycemia was effective. Combination this exercise with other exercise will provide more optimal result.

**Keywords:** *diabetic exercise, aerobic exercise, glycemc control, type 2 diabetes mellitus*

# IMPLEMENTATION OF TRANSITIONAL CARE LIFESTYLE EDUCATION MANAGEMENT APPROACH IN CONTROLLING BLOOD GLUCOSE LEVEL IN PATIENTS WITH TYPE II DIABETES MELLITUS

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## **ABSTRACT**

**Introduction:** Diabetes Mellitus (DM) is a chronic disease that cannot be cured but can be controlled by maintaining blood glucose levels within normal limits. Normal blood glucose levels can be achieved by maintaining diet, physical activity, adherence to treatment and monitor blood glucose levels regularly. Active role of health care workers to provide education, monitoring and evaluation to the DM patient are very beneficial in the management of DM. The aim of this study was to determine the effect of transitional care with life style education management approach to control blood glucose level in type 2 DM patients. **Method:** The design of this study was a quasy experiment with pre post-test control group. This study was conducted at DM clinic at Dr. Soepraoen hospital in Malang. Thirty six (36) subjects with type 2 DM with blood sugar levels less than 300 mg/dl, using oral anti-diabetic drug (OAD) and without DM complication were selected as respondents. Wilcoxon rank test was used to analyse the test results. **Result:** Implementation of transitional care through lifestyle education management approach significantly increased the adherence to diabetic diet, physical activity, medication adherence and compliance to blood glucose level monitoring ( $p = 0.000, 0.005$  and  $0.001$  respectively) in DM patient. **Discussion:** Results suggest a positive effect of the transitional care with lifestyle education management approach on maintaining blood glucose level in patients with type II diabetes.

**Keywords:** *transitional nursing, lifestyle management, blood glucose, DM*

# ADHERENCE CONTROL BLOOD GLUCOSE USING TELENURSING: A LITERATURE REVIEW

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## ABSTRACT

**Introduction:** Diabetes mellitus is a chronic metabolic disorder, very progressive and cause a lot of complications. It main cause of blindness, kidney failure, dialysis, and amputation. Some studies indicate that adequate control of blood glucose is very important and can prevent or delay the complication. Telenursing is a method can use to help patients diabetes in adherence behavior therapy which is expected to control blood glucose. The purpose of this literature review was to determine the effectiveness of telenursing in adherence behavior controlling blood glucose. **Methods:** Articles were collected through an electronic database CINAHL, Google Scholar, and Proquest using keywords telenursing, diabetes mellitus, adherence. Inclusion criteria in this literature review was telenursing for diabetes research international journal publish between 2009 until 2015. A total 6 studies were collected and analyzed for this review, that consist of five RCTs and one quasi experimental study. **Result:** In this study effect of telenursing in many contries was usefull to maintaining blood glucose. Some result shown HbA1c decrease for 3 until 6 months. **Discussion:** Information technology (telenursing) is usefull increase adherence behavior to control blood glucose in diabetes mellitus.

**Keywords:** *diabetes mellitus, telenursing, adherence*

# A LITERATURE REVIEW: THE EFFECT OF NURSING SUPPORTIVE EDUCATION ON SELF CARE BEHAVIOUR AND QUALITY OF LIFE OF PATIENTS WITH HEART FAILURE

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## **ABSTRACT**

**Introduction:** Heart failure is a chronic, progressive disease associated with high morbidity and mortality. It also becomes a major health and social problem in the world which decreased quality of life (QoL). Heart failure management needs integration of medication and supportive education due to exacerbations and hospital readmission are frequently precipitated by lack of knowledge and non-compliance with self-care behaviours. The aim of this review was to examine the evidence around the effects of nursing supportive education on self-care behaviour and QoL of patients with heart failure. **Method:** Literatures was searched in appropriate databases, using PICO framework, from January 2000 until August 2015. **Result:** Six relevant articles were found and reviewed. Five studies were randomized control trial and only one study used prospective, experimental cohort study. From the review it can be pointed out that the found literature was relatively under power (small sample size), employed differing protocols in conducting intervention, and short in duration. It was only one study using long term follow up to control sustainability of intervention. The intervention was described quite well in the articles. **Conclusion:** Nursing supportive education is considered to be an effective intervention to improve knowledge, increase self-care behaviours and quality of life patient suffering from chronic heart failure. These findings are important in providing care and may optimize therapy. Further randomized control trial employed larger sample size and long duration of observation is necessary to gain sustainability and generalization of study.

**Keywords:** *heart failure, supportive education, self-care behaviour, quality of life*

# AEROBIC EXERCISE FOR PATIENT WITH CHRONIC KIDNEY DISEASE : A LITERATURE REVIEW

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## ABSTRACT

**Introduction:** This literature review explain the kind of physical exercise for patient with Chronic Kidney Disease (CKD) predialysis and intradialysis. **Methods:** The articles were taken from *Springerlink*, *Google Scholar*, dan *Science Direct* data bases. In process of sorting, there are 20 articles which suit the topic. Then the articles sorted more by inclusion criteria definite by the reviewer. The inclusion criteria: kind of exercise, the benefit of physical exercise. *PICO framework* was used to find the related articles, using *physical exercise, CKD, benefit of physical exercise* keywords. Finally, this literature review use four articles which taken from 2000-2014. **Result:** Physical exercise gives advantage for the patient with CKD. Patient with CKD who are indicated to get exercise therapy were suggested to do exercise program. Exercise programs for CKD patients included water based exercise regular walking exercise or other aerobic exercise. These exercises optimize oxygen consumption in organ. It can be improved cardio-respiratory functional, cardiovascular reactivity, renal function, and oxidative stress status, exercise tolerance. In addition regular exercise can avoid an increase in blood pressure medication and improvements in quality of health and life and uremic symptom, also improved the anaerobic metabolic threshold (AT-VO<sub>2</sub>) and high-density lipoprotein cholesterol (HDL-C) levels, and reduced triglyceride levels. Exercise therapy also improved estimated glomerular filtration rate (eGFR). **Discussion:** Physical exercise is important and it should be done by patient with CKD. It is associated with lower risk of overall mortality and renal replacement therapy (RRT). Also, appropriate support and recommendation from physician are needed. The benefit of physical exercise depend on patient's age, renal function, and comorbidity.

**Keywords:** *physical exercise, aerobic, chronic kidney disease*



# HEAD INJURY OF TRAFFIC ACCIDENT ON 6–14 YEARS IN INDONESIA

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## ABSTRACT

**Intraduction:** Head injuries caused by traffic accidents showed the highest incidence among other accidents. This study aims to describe head injuries caused by traffic accidents. **Method:** Design research was the study documents. Data get from Riskesdas 2013. Riskesdas was survey that is health ministry of Indonesia. Chi-square test with  $\alpha = 5\%$  to see the connection, as well as to look at risk by looking at the value of odds ratios with 95% Confidence significance interval Odds ratio as a tool to analyze. **Result:** The results showed an association helmet use on the incidence of head injuries caused by traffic accidents motorcycle where motorcyclists who do not use helmets have the highest risk.

**Keywords:** *head injury, the use of helmets, traffic accidents, motorcycle users, 6–14 years old*

## INTRODUCTION

Traffic accidents are unexpected events happened on the highway. Traffic accidents are one of the events that cause injury. WHO reported that the incidence of accidents including traffic accidents over the case in low-income countries compared to developed countries. Deaths from road accidents every year the amount of 1.24 million and 20–50 million non-fatal injuries (WHO, 2014). Report police forces of the Republic of Indonesia in 2011 reported that in 2010 almost every hour traffic occurs crashes are fatal namely the death of 34 cases. Figures injuries resulting from traffic accidents based on a report by the health minister said Riskesdas injury prevalence was 8.2%. Injuries caused by motor traffic accidents was 40.6%. The results of analysis of Riskesdas in 2013 stated that the proportion of land transport injury that motorcycles and other land increased when compared Riskesdas 2007 is 25.9% to 47.7% (MoH RI, 2014).

Injuries and accidents are the top 10 causes of death in the world. Injuries are mostly caused due to an accident factor. Traffic accidents are a higher incidence than other accidents. In the motorcycle traffic accident that most objects are hit by a motorcycle.

Head injury as a result of traffic accidents are events should be prevented because of a head injury can affect a person's quality of life. It is associated with disturbances in the function of the noble man, the brain.

## RESULT

Incidence of traffic accidents in Indonesia is increasing, so the deaths and

severity of injuries and the cost of operating losses. Accidents are more common in adolescence and productive where the vast majority were aged 15-29 years (Australian Government, 2014). In Indonesia traffic accident that resulted in a head injury often occurs at the age of 6- 14 years in which both the city and county in Indonesia as shown in Table 1.

Table 1. Events Head Injuries and age according to difference between the City and Country in Indonesia in 2013

City	Head Injury	Yes	Number	773
			%	37.9
		No	Number	5097
			%	40.2
Total			Number	5870
			%	39.9
Regency	Head Injury	Yes	Number	666
			%	35.2
		No	Number	3915
			%	40.8
Total			Number	4581
			%	39.9
Total	Head Injury	1439	Number	1439
			36.6	%
		9012	Number	9012
			40.5	%

The incidence of injuries resulting from accidents should be prevented by lowering the risk of accidents that could reduce the incidence of accidents.. The traffic accident on the students have a tendency to increase as shown in Figure 2.

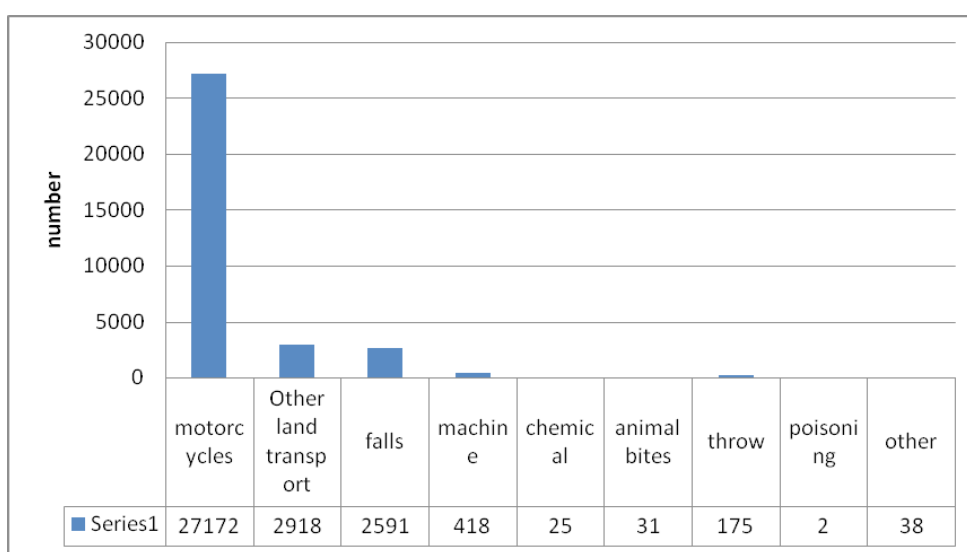
Table 2. Distribution of Head Injury Incidence According to The Scene in Indonesia in 2013

Locus	Number	%
House	28827	36.1
School	4568	5.7
Sports Arena	2509	3.1
Highway	33370	41.8
Business Area	1764	2.2
Industry/ Construction	1089	1.4

Locus	Number	%
Farm	7059	8.8
Others	690	0.9
Total	79876	100.0

Resources: Riskesdas, 2013

Incidence of head injuries at highway largely due to traffic accidents motorcycle that is 27 122 (81.4%) as shown in figure 3.



Resources: Riskesdas, 2013

Figure 1. Distribution of the incidence of head injuries at highway by cause in Indonesia in 2013

The risk of not using a helmet for head injury and 2.39 times than that wearing a helmet when riding a motorcycle.

### DISCUSSION

Analysis of traffic accidents showed several factors that can influence it. Based Traffic Safety Education Program Impact Theory of skills and behaviors that motorcycle safety is affected by the knowledge of the rules of motorcycles (Knowledge of Motor Vehicle), personal responsibility

(Acceptance of personal responsibility on public highways), motorcycle driving training (Training in skills Necessary for the safe operation of motor vehicles), understanding the causes and consequences of accidents (Understanding of causes and Consequences of accidents) (Ellwanger S.J., 2006). Users can easily motorcycle injury or death due to a

collision with another vehicle. Among the motorcyclists who died 73% for head injury (Chang, 2005). Factor is the character of the human host as motorcycle users who have a significant probability for the occurrence of traffic accidents that resulted in injury to the head such as age, gender, and health status and behavior in protecting themselves. Age is youth risk of traffic accidents is likely to increase (see Table 1). According to WHO's 2014 death in the age group 15 to 24 years mainly due to an accident on the road, while the group of 6-14 years in road accident deaths came second. The ability to use tools and vehicles associated with the occurrence of traffic accidents on motorcycle users. The ability to drive may be represented by ownership Driving License (SIM). Skills driving where the driver who has a driver's license may not necessarily be a good driver because in addition to pass the test person should have enough experience that will provide sufficient skills and knowledge about how to bring the vehicle safely and without violating traffic rules. The results showed that the SIM ownership still provide opportunities for traffic accidents by 50% (Hendrati, 2002). This skill is very important for the driver to control the vehicle dikemudikannya. However, it does not mean that a person who has the skills will not be an accident.

Head injuries occur because of a conflict between the head with sutu objects. Injuries according to WHO 2001 may be affected by the condition of the host (motorcyclists), the strength of the impact energy can not be retained by the body (the agent), the condition of the vehicle, and environmental conditions, either physical, social and

psychological (environment). Head injuries are mostly due to events on the highway due to traffic accidents motorcycle.

J. Sredharan research in 2010 showed that 26.9% are using helmets among motorcycle users. In this study, explained that there is a significant association between the use of helmets with the incidence of head injury caused by traffic accidents. Users who do not use a motorcycle helmet is the age group most of infants, toddlers, school children and adolescents (see table 1). this may be due to the attitude of the people who see wearing a helmet limited to adults and elderly groups only.

Legislative support that should apply that helmets should be used for motorcycle users regardless of age group. Weak enforcement of rules can cause easily violate community supported low public awareness of the usage of helmets can prevent head injuries. Research Sreedharan of 2010 states that the user motorcycle argue that strengthening the rule could increase the use of helmets.

The attitude of the population that simply wearing a helmet at the time was on the highway alone, while traveling on the road between the village to village is not using a helmet is an attitude that is at risk for head injury caused by traffic accidents. At the time of learning how to ride a motorcycle may not use a helmet, it is at risk for head injury.

The use of helmets among motorcycle users showed more women who do not wear helmets than in men, although such a head injury is more common in males. Sreedharan study in 2010 showed between 48% male wearing a helmet but only 9.5% of women who use helmets.

Helmet national standards of Indonesia (SNI) readily available in the community. Quality helmet affects the price of the helmet. Helmets are sold in society in general intended for adults and children, but the baby is not intended to be sold when the baby has the likelihood of injury to the head when in the ride on a bicycle with an adult. The use of helmet is influenced by the perception of motorcyclists against hazards when not using a helmet (Sukor NS A and Satoshi F., 2011). Decisions taken by the driver or react to avoid the risk factor faster then the possibility of an accident is smaller. The state of the driver as the ability to vision, hearing, strength and mobility can affect the occurrence of accidents. These conditions can be changed when the driver in a state of fatigue, pain and the presence of psychological change (Hobbs, 1995). Driver's reaction where sometimes the driver must take a decision in the face of the traffic situation. This decision is influenced by the concentration. Concentration influenced fatigue caused inadvertence. causing an accident that causes injury.

Inadvertence is the factor that allows the occurrence of traffic accidents due to distraction while driving. Inadvertence can be caused due to loss of concentration which can be caused by drinking. Conditions emotional mental disorders are often also cause traffic accidents. Unstable mental state often causes people to consume alcohol.

Concentration resulting in less traffic accidents must be prevented. The use of mobile phones while driving affects the concentration. Using a mobile phone while driving behavior associated with the incidence

of traffic accidents (Mahawati&Prasetya, 2013). Lowering the risk of traffic accidents can be done with an approach that is associated with behavioral psychology motorcycle users. Incidence of traffic accidents can be attributed to the motorcycle driver behavior where bad behavior is higher incidence of traffic accidents motorcycle in comparison with the behavior of medium (Lulie, Hatmoko, 2005). Driving behavior with speed > 40 km/h, overtaking two vehicles at the same time opportunity for motorcycle accidents (Permanawati, Sulistio, wicaksono, 2010).

Behavior someone realized one of them due for cognitive development. Cognitive is all that is known and thought. All matters relating to the interaction of a person's thinking with his emotions. Cognitive development of a person depends on the background of social culture. Among the four stages of Piaget's theory of cognitive development according to age 11 and older is the age that entered the stage of formal operational thinking. Age casualty mostly teenage years (6–24 years) which is adolescence including community groups that are included in the formal operational stage during which teenagers are capable of abstract thinking and hypothesis see Table 1. The ability to think abstractly and hypothesis is the ability to think about the possibility that would happen in a situation is not only based on empirical terms alone. Pattern think teenagers are able to analyze events with a lot of interpretation in which an event is one possibility. Patterns of thinking with regard to the proportion of adolescents who then connects with the data collected to prove the hypothesis. According Palget teens think

this pattern is called hypothetic deductive thinking. Adolescent cognition structure has reached a state of equilibrium in which adolescents have the ability to further adjust to the problem effectively. At this stage of cognitive development in adolescents has shown the ability to think to solve the problems faced by the various perspectives and ways in which any activity that results are not expected to be accepted as a teenager was able to take into account the possibility that could happen. In the formal operational stage of cognitive development as well able to collect his thoughts into a concept is also able to collect the concept of other people's thinking. The nature of adolescent egocentrism self arises because the ability to think the concept by his own thoughts. Symptoms in adolescent egocentrism and idealistic teenager due to the dimensions of thought is less realistic dimension which underestimates the other person's perspective. Formal operational stage of cognitive could not be achieved due to environmental stimuli or less gave inadequate formal education. The development of thinking is influenced by maturity, experience, social transmission and equilibration. According to Piaget's theory of development in engineering education implies that education can be done with a child-centered approach, activities, individual learning and social interaction (Setiono, 2009).

The development of moral reasoning according to Kohlberg, most teens have reached conventional levels. The conventional level of internalization capability circumstances described themselves (self) with the rules of others, especially the rulers.

At the level of conventional reasoning developing sociomoral perspective is the perspective of a member of society. Developments in conventional levels are reasoning in accordance with the expectations of society in which someone will take notice of social rules, expectations and roles in society (Setiono, 2009).

Coordinating the development of social perspectives (social perspective coordination) is the development of a person's thinking about the world in which one's interpersonal conceptualize themselves and others. There are two theoretical approaches, namely the conceptualization of self and others and the theory of cognitive development. According to the model of a social perspective coordination Selman

There are three models (approach) intervention in society, namely the development of local communities, social policy interventions and models of social action. Three models are distinguished according to the objectives of the community action, assumptions about the structure of society, the basic strategy in making changes and characteristics of the tactics and techniques change and the role of prominent practitioners, media change, the orientation of the structures of power, limits the definition of the service recipients (beneficiaries), assuming interest of groups in the community, the concept of the service recipient, the concept of the role of the service recipient and the use of empowerment (Adi, 2012).

Three forms of community practice (Community Practice) is the practice of community development, community

action, community service approach. Three forms are distinguished according to the objectives, participants, methods and role (Adi, 2012). Negotiation style there are 2 kinds of software and hardware solutions which can be done by changing the rules of the game.

Some indicators of technological development in Indonesia which can support community development is the availability of the telephone network 46 per 1,000 inhabitants, 138 mobile phone service users per 1,000 inhabitants and internet use 67 per 1,000 inhabitants in 2004 (Adi, 2012). Human capital development in the education sector in Indonesia in 2004, including the percentage of literacy rate among people aged 15 years and older is 90.4%, the percentage of expenditure on education than the overall financing of the government by 9% (Adi, 2012).

Problems and potential of the community when viewed from the human and social factors include factors predisposisi and community behavior, reinforcing factors, social capital and spiritual capital (Adi, 2012). Problems and potential of community views on the human factor can not be seen from the physical, financial capital, capital, technology and environmental capital (Adi, 2012).

## CONCLUSIONS AND SUGGESTIONS

Head injuries from traffic accidents can be affected because of the use of helmets on motorcyclists. Incidence of head injury can occur in all age groups. Incidence of head injuries mainly occur at a young age is 6-14 years.

Suggestions that needs to be done is the need to supervise the use of helmets by law approach. Provision of financial penalties for motorcycle users will be able to reduce the occurrence of head injury

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# HONEY BASED DRESSING AN ALTERNATIVE BURN WOUNDS MANAGEMENT (ANTIBACTERIAL AND PATIENT FRIENDLY)

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## **ABSTRACT**

**Introduction :** Burn wounds is one of the trauma that often occur in everyday life, often an accident mass (mass disaster). Burn wounds classified a case of serious epidemics in recent years ini. Journal of burns care and rehabilitation edition 1992, an estimated 2.4 milion burns cases a year in the United States. Of these 650,000 that are handled by medical experts and 75,000 treated at home and 12,000 of it ending with death. According to statistics of special services unit Cipto Mangunkusumo, the number of cases treated during 1998 there were 107 cases or 26.3% of all cases treated plastic surgery. Of these cases there were over 40% a degree burns II-III with a mortality rate of 37.38% . All burns (except for minor burns or burns degree I) require immediate medical treatment because of the risk of infection, dehydration and other serious complications (balletto, et al, 2001). In the treatment of burns, one of the standard treatment used is the use of silver sulfadiazine (SSD). SSD used to the skin to prevent and kill bacterial or fungal infections in the burn wounds. Several studies have also been developed for the treatment of burns, especially of natural materials. **Methods :** In this literature review, the first step on the author is making a clear review question is whether patients who suffered burn wounds, honey -based application dressing can improve the healing process and prevent infection? After that the author, make searching articles or journals with an appropriate topic done using ScienceDirect database, PUBMED and Google Scholar. Keywords used were "Burns wound" and "Honey" and "wound care" and "wound healing". And to search in Google scholar done using the same keywords but in the language of Indonesia.Pencarian in PUBMED obtained 18 articles, while a search on the keyword obtained Sciencediect with 26 articles. **Result:** The results using different parameters in determining the wound healing process for research. In the study, parameters used to measure the healing process of burn wounds include: long healing time, loss of pus, the appearance of granulation, removal of necrotic tissue, the appearance of scarring and loss of scarring in the wound. Another research, parameters used are the result of tissue culture, cell count, viability assay and cell shapes that exist. Researchers parameters

used in determining the process of healing in burns is very good. Results of the study were obtained from three research journals used were in the study shows the significant results of the use of honey-based dressings for the treatment of burn wounds. **Discussion:** From the review of the above , the treatment of burn wounds with honey-based dressing is optimal when compared with other materials , although there is research that says the honey and silver sulfadiazine has the same effectiveness, but silver sulfadiazine still have side effects that negatively more which need to be considered again in administration. Seeing great benefits of honey for treatment burn wounds, it is necessary to conduct further research on the variations in composition and dosage madudalam accelerate the healing of burn wounds, especially burn wounds that become infected.

**Keywords:** *honey, wound, dressing, antibacterial*

# THE USE OF PHARMACOLOGICAL AND NON-PHARMACOLOGICAL THERAPIES IN ELIMINATING SMOKING: A SYSTEMATIC REVIEW

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## **ABSTRACT**

**Background:** The effort of smoking cessation in community has been entered into various targets, which starting from school age children to nurses, patients and families at the hospital with a variety of methods both pharmacological and non-pharmacological. This study was aimed to identify and evaluate the effectiveness of the pharmacological and non-pharmacological therapies in attempt to make people stop smoking through evidence based on practice approach. **Method:** Systematic review was obtained from literatures including several journals that published in the 2011 up to 2015. The literatures were in the form of original research, literature review, research article and the original article. **Results:** Pharmacological therapy is a therapy that is used to replace nicotine, while non-pharmacological therapies is more like a self-help therapy. Based on the result, pharmacological therapy is more effective than non-pharmacological therapies. **Discussion:** Although the pharmacological therapy effective for smoking cessation, the combination of pharmacological and non-pharmacological therapy has proved much more effective in helping smokers to stop their smoking habit.

**Keywords:** *pharmacological and non-pharmacological therapies, evidence based practice, smoking cessation*

## INTRODUCTION

Smoking basically have positive and negative impact. Although have positive impact but the negative impacts is more, especially for health. In several country, smoking becomes leading cause of death, for example 2.4 million death because of smoking in the United States. Cigarette is also becomes cause of 500 thousand deaths a year in the European Union (Tak, H.W., et.al., 2011). Ironic that smoking at this moment already becomes a life style of children to elderly.

A high prevalence of smoking at the age of 25–44 years old (Babizhayev, M., Yegorov, Y., 2010). Whereas in India, there are 250 million user of cigarette who were aged 20 years old in which more men than women. In order to improve public health, one of effective way taken by USA is a program to stop smoking (Tak, H.W., et.al., 2011).

Smoking cessation also become a work goal for health workers. Many ways had been done by health officer such as medical doctor, nurse and concelor. The aims of this systematic review was to identify and evaluate the effectiveness among pharmacological and non-pharmacological therapy in order to stop smoking behavior by evidence based practice approach.

## METHOD

The systematic review was obtained from variety of published literature in 2011 to 2015 through several journals, they are BMC Public Health, Journal of Nursing Education and Practice, Journal of Hospital Administration, The Journal of The Association of Chest Physicians, Colonial Academic

Alliance Undergraduate Research Journal and Internationale Journal of Preventive Medicine. That literature was an original research, literature review, research article and original article. All of literatures which is used in this review systematic it was six literatures which is the writer has clarification into two method, they are pharmacological and non-pharmacological. The writer has identification some intervention to stop smoking in the several countries that have applied an effort to stop smoking in USA, UK, Australia, Iran, Turkey, India, and Egypt.

Investigation of research were consists of pharmacological and non-pharmacological therapies used in effort to stop smoking and effectiveness among pharmacological and non-pharmacological therapies used in effort to stop smoking.

## RESULT

### 1. Pharmacological therapy

The first method to stop smoking which used in several countries is by pharmacological therapy. All of the literatures which used in this systematic placed this therapy as one method to stop smoking. Kind of pharmacological which more used is nicotine replacement, known as *Nicotine Replacement Therapy* (NRT), which has been approved by *Food and Drug Administration* (FDA). NRT providing an alternative form of nicotine to relieve symptoms of smoking dependence (Saha, K., 2013). NRT consists of a patch, sublingual tablets, candies, lozenges, inhaler and nasal spray. This product is safe for patients with cardiovascular

disease, including stable angina. Nicotine replacement do not increase the coagulability blood or exposure to oxidizing carbon monoxide or group that can damage the endothelium (Heydari, G., et.al., 2014).

The type of other pharmacological is also effective in stop smoking and is found in several journals that Bupropion is also recommended by FDA (Saha, K., 2013). In Addition, Zyban and Champix also earn the highest score after the NRT in its effectiveness against smoking cessation (Heydari, G., et.al., 2014).

## 2. The non-pharmacological therapy

Other therapies found in all journals which use in this systematic review and also effective in efforts to stop is non-pharmacological group. Non-pharmacological therapy is used as support to pharmacological therapy with the aim to change behavior by using multiple interventions.

Self-help is the type of non-pharmacological therapy most commonly found the literature used in this systematic review and have a level which is equivalent to pharmacological therapy is even more effective than pharmacological therapy. The finding of which a research article which is carried out by Tak, H.W., et.al. (2011), which states that behavioral therapy is most often used by the public of the Unites States and New South Wales (Australia) in effort to stop smoking is self-help is used in clogs adolescent and adult

age group. Although both countries have a small self-help proportion when compared to NRT. Other equivalent literature that a comparative study carried by Heydari, G., et.al. (2014) on cessation and tobacco control methods found self-help has the highest scores after NRT, Champix and Zyban. While for the Turkish people, self-help is a one of stopping smoking method which more effective than used NRT and medicines. That self-help method such as cold Turkey and a reduction to stop smoking before stop (Tak, H.W., et.al., 2011).

Hypnosis and hypnotherapy and acupuncture is the second therapy of non-pharmacological which usually used in effort to stop smoking were found in a part of most literature. Hypnosis and acupuncture become adjunctive therapy in efforts to stop smoking in India (Saha, K., 2013). Heydari, et.al. (2014) stated that hypnosis is the middle score lowest based on the comparative study done. The result of research done by Mohamed, N.A. & Eimwafie, B.C. (2015), showed that the most effective method against for high school teens is Egypt in Mesir where 2/3 from students learn to stop after nine weeks of training hypnosis and the percentage of cigarette pacs was reduced every day. Another literature showed that hypnotherapy and acupuncture also used as secunder intervention which can used by nurse in efforts to stop smoking for nurse patients with cancer

and family in the hospital (Mackereth, P., et.al., 2015).

Counseling is a type of non-pharmacological therapy which rank third identified in some literature. That literature stated this therapy is also effective and usually used effort to stop smoking. Counseling either by phone or in person counseling is the middle score in a comparative study done by Heydary, et.al. (2014). Although it has a small proportion in use, but the method of counseling remains a part in smoking cessation efforts in the United States and Australia. Both countries are using counseling by phone/telephone helpline (Tak, H.W., et.al., 2011). In India, the counseling was ranked second, which is effective in smoking cessation efforts. Counseling is done over the telephone and in person. To get effective results, it must be done by trained counselor and repeated at least four weeks (Saha, K., 2013).

Non-pharmacological therapies which can be used also in efforts to stop smoking is groups therapy, cognitive behavior therapy (CBT) and advice/intervention of a doctor. Although contribute to the efforts to stop smoking but this method is very little method found in literature. Wells, A.J. & Mitchell, J.C. (2012), stated that group therapy and CBT is used as effective method in efforts to stop smoking teens and young adult so that they can change the smoking habit. Doctoral intervention into the most effective method become the primary method

in efforts to stop smoking in India. This method can improve smoking cesaation 30% (Saha, K., 2013).

## DISCUSSION

Smoking cessation efforts in several countries like USA, New South Wales (Australia), the UK, Egypt, Iran, Turkey and India is based on the results of a review that is conducted through several methods including Nicotine Replacement Therapy (NRT), Champix, Zyban, Bupropion, Self-help, Hypnosis, Hypnotherapy, Acupuncture, Counsleing, Group Therapy, Cognitive Behavior Therapy (CBT), and Advice/intervention of a doctor. Overall these methods can be classified into pharmacological and non-pharmacological therapies. Which include pharmacological therapy is NRT, Champix, Zyban and Bupropion. While the Self-help, Hypnosis, Hypnotherapy, Acupuncture, Counsleing, Group Therapy, Cognitive Behavior Therapy (CBT), and Advice/intervention of a doctors grouped into non-pharmacological therapy.

Results of the review has been carried out on six literature used, it was found that the pharmacological therapy group were the most effective group therapy and most commonly used in smoking cessation efforts, both in the group of smokers teens, young adults and elderly. This is because the effects produced faster in reducing the symptoms of smoking dependence. The effectiveness of these drugs has been recognized and approved for use by FDA. Of some pharmacological theraoy used, NRT expressed more effective than a similar drug because some preparation such as

nasal sprays, inhalers and patches steam can reduce symptoms of smoking dependence more rapidly at twelve week after use and users more comfortable in using the product (Saha, K., 2013).

Non-pharmacological therapies also have effectiveness against efforts to stop smoking, although its use in several countries such as Australia, USA and UK remained the lowest proportion. Based on a review of six literatures used, all articles are obtained using non-pharmacological therapy as an alternative therapy or secondary intervention after pharmacological therapy. The effectiveness obtained by the cognitive changes of the smokers would be the negative effects caused by smoking and behaviors that can change the smoking habit can even quit smoking.

Types of non-pharmacological therapies are most commonly used and most effective is based on a review of self-help. Other non-pharmacological therapy is also effective as a smoking cessation method is a hypnosis, hypnotherapy, acupuncture, counseling, CBT, group therapy and doctor's advice. However, its use is still in a small proportion.

The types of methods in non-pharmacological therapy can basically overlap between one and the other in cognitive and behavioral change of smokers so as to reduce or even stop the smoking habit. These methods have similarities and differences. The equation is all of these methods aim to assist smoking cessation well with cognitive and behavioral change of smokers. While the difference is only in technique and execution time of each method.

Although, based on the results of a review that pharmacological therapy have a higher level of effectiveness in almost all literature when compared with non-pharmacological therapy, this is because the effect is more rapid in reducing symptoms of smoking dependence. However, in practice should be combined because both mind and body is one unit and mind will greatly affect a person's behavior. Thus, it is important to note that in therapy should also be given the motivation to quit, by educating patients about the dangers of smoking and find the best alternative for patients in making choices for smoking cessation (Wells, A.J. & Mitchell, J.C., 2012).

## CONCLUSION

It can be concluded that pharmacological therapy through the use of NRT proved is more effective and most widely used as a method to quit smoking. However, a combination with non-pharmacological therapy also showed effective results in smoking cessation effort.

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# MUSIC THERAPY IN ACUTE AND CHRONIC PAIN MANAGEMENT: A LITERATURE REVIEW

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## ABSTRACT

**Introduction:** This literature review explains music therapy as a non-pharmacological therapy. A medical team will take action which will reduce the reception and perception of pain.

**Methods:** The articles were taken from Google Scholar, PubMed, MEDLINE, and CINAHL. Data searches using key words in the English language are: "music therapy", "pain", "pain management nursing", "chronic disease". Journal articles are limited to the year, i.e. in 2010–2014 and obtained 28 articles. Journal articles obtained, then reviewed in accordance with the inclusion criteria. Finally 13 articles that match and then identified and presented in tabular form. **Result:** Research that has been explored in this article most of which is around 13 articles using the experimental group and the control group to determine the effect and effectiveness in dealing with pain, both acute pain and chronic pain. Research that does not use a control group is a qualitative research, in which respondents were interviewed about the experience in dealing with pain while in ICU or at any time after having surgery. Based on the results of the qualitative research articles showed that respondents largely use music therapy to overcome the pain felt and music therapy can effectively reduce the perceived pain intensity. In the true quantitative experimental study using a control group that did not receive treatment in the form of music therapy altogether and just get a nursing intervention as needed. In the experimental group / treatment, respondents receive music therapy when it starts to feel pain. As it did before surgery, during wait until done intravitreal injection, during childbirth and postpartum, during burn dressings, prior to laparoscopic surgery, patients with spinal surgery, as well as efforts to relieve the pain in palliative therapy. The experimental study of the get result that music therapy can reduce pain intensity or scale well for the pain that is felt in acute or chronic. In other words, music therapy is very effective pain management used to lower or reduce pain perceived by respondents. The results showed that the treatment in the form of music therapy in overcoming the pain both acute and chronic proved to be effective. Of three qualitative research on the article found that the respondents admitted to using music therapy to reduce the pain. Besides pain is also a major selection and was included in the top four which respondents choose to manage pain compared with the efforts of other distractions such as mild massage. In the 12 other articles were an experiment,

also show significant results that the pain can reduce the pain felt by the respondent. In a study of patients with surgical spinal measurements of blood pressure and cortisol in urine showed a significant difference in which the blood pressure in patients with music therapy was lower than the control group, while for the measurement of cortisol in urine is not give difference significantly between the experimental group and the control group. **Conclusion:** Literature review on the results of 13 research articles that have been reviewed show that music therapy can be used as a nursing intervention to reduce pain between acute pain and chronic pain. It can be applied in the hospital and can be continued at home in addition pharmacological therapy as an effective method of pain management.

**Keywords:** *music therapy, pain, pain management, chronic disease*

# SELF-MANAGEMENT IN TAKING CARE ABOUT BREAST SELF EXAMINATION (BSE) AS EARLY DETECTION OF BREAST CANCER

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## ABSTRACT

**Introduction:** Breast cancer remains as a major problem in Indonesia. Incidence of breast cancer that was previously common in middle-aged women is now beginning to infect young children. This is due to the low care of them-selves to check/examine their own breasts. This study aimed to identify the correlation between self-concern and Breast Self Examination (BSE) behavior. **Method:** The study population was all female students of Faculty of Nursing of WMCU. Sample size was 84 students enrolled by means of convenient sampling. Independent variable was self-concern while the dependent variable was BSE behavior. Data were collected using questionnaires and then analyzed using statistical test of correlation. **Result:** Result showed that there was a significant correlation found between self-concern and BSE behavior ( $p = 0.000$ ). **Discussion:** There is a correlation between self-concern and BSE behavior. It is suggested to the authorities to promote the BSE's behavior in the wider community.

**Keywords:** *self-care, BSE, health education, breast cancer*

## THE EFFECT OF ART THERAPY ON LEVEL OF SPIRITUALITY IN WOMANS WITH STAGE I-II BREAST CANCER

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### **ABSTRACT**

**Introduction:** Cancer is one of the leading causes of death in the world other than heart disease. This disease can cause a woman to deal directly with issues of life and death, which can lead to the need to address the aspects of spirituality. Art therapy could be expected to be used as a complementary therapy to increase the level of spirituality in women with breast cancer stage I and II. The purpose of this study was to determine the effect of art therapy in women with breast cancer stage I and II. **Methods:** This study used a quasi experimental with pre and post-test control group design. The sampling technique used purposive sampling; twenty one samples were recruited for each group. Data were collected before and after art therapy intervention by Facit Sp-12 Indonesian version. Respondents followed 6 sessions of intervention with duration of 30–45 minutes per sessions. Data were analyzed using independent t test and paired t test. **Results:** The results showed that after art therapy intervention there are differences in the mean scores of spirituality in the intervention group ( $t = 0.753$ ;  $p$  value = 0.000), and there are differences in the mean scores of spirituality between the control and intervention group ( $t = 9.482$ ;  $p$  value = 0.000). Spirituality so far only been associated with things that are religious, but the real meaning is broader than that. Spirituality is also related to the human relationships with other human beings and human beings with the environment. Art therapy can improve the contact between inner experience and external reality so as to form a flexible response in the face of the situation. **Conclusions:** Based on the results, researchers concluded that art therapy can increase the spirituality in breast cancer patients with stage I and II. Therefore, nurses can act as a facilitator to provide art-based therapy in order to improve the adaptability of psychological and spiritual in patients with breast cancer stage I and II.

**Keywords:** *art therapy, breast, cancer, spirituality*

# PRECANCEROUS LESIONS BASED CERVICAL CANCER RISK FACTORS IN CERVICAL CANCER FOUNDATION WISNU WARDHANA SURABAYA (SECONDARY DATA ANALYSIS)

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## ABSTRACT

**Introduction:** In Asia Pacific, found every year about 266,000 cases of cervical cancer, 143,000 of whom died in the productive age. The number of cases of cervical cancer in Indonesia is still quite high. Every year no less than 15,000 cases of cervical cancer are found or discovered everyday estimated 40–45 new cases and approximately 20–25 cases die every day, which means that every hour one woman died of cervical cancer. The aim of this study was to determine the incidence of precancerous lesions of cervical cancer is based upon the risk factors of cervical cancer in Cancer Foundation Wisnu Wardhana Surabaya. **Method:** this research is quantitative descriptive study using secondary data with cross sectional design. Sampling techniques using simple random sampling to obtain samples of women who come to the Cancer Foundation Wisnu Wardhana Surabaya for the early detection of cervical cancer as many as 229 women. **Results:** of this study obtained from 229 women examined, the majority were married at the age of 20 years (78.6%), 58.5% having 1–2 children, 41% use any simple contraception and 95% occurred inflammation (precancerous lesions) on the cervix. **Discussion:** Provision of information about the importance of early detection of cervical cancer still needs to be given to all women because of the incidence of cervical cancer can be prevented if known as early as possible.

**Keywords:** *precancerous lesions cervical, marriage, contraception, the number of children*

# THE RELATIONSHIP BETWEEN PARENTS' CARE PATTERNS AND PRE SCHOOL AGE CHILDREN'S SELF ESTEEM

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## **ABSTRACT**

**Introduction:** A preschool age (3 to 6 years ) is a golden period for children, whereby on this period children are very sensitive to absorb all information around them especially from their family or parents. The environment of the family is very important for the development of children's self-esteem. Children who grows up in harmonious and religious family, parents whogive love, attention and guidance in their life, hence the development of their self-esteem tends to be positive .The purpose of this research is to know the relationship between parent's care patterns and pre school age children's self esteem. **Methods:** This research used correlational with Cross Sectional approach. The population is all parents who have pre school age children on TKIT Ar-Ruhul Jadid Sengon, Jombang. This research used the samples taken from some parents who have pre school children on TKIT Ar-Ruhul Jadid Sengon Jombang. This also used purposive sampling technique. Data collection instrument in this research used questionnaires and structured interviews on both variables. Statistical tests used Spearman Rank with the level of significance ( $\rho \leq 0.05$ ). If the results obtained  $\leq 0.05$ , the research hypothesis is accepted means there is relationship between the aauthoritativecare patterns and the increasing of preschool children's self esteem. **Results:** It can be obtained from the research that most parents' care patterns are authoritative is 26 respondents (74.29 %). There is almost entirely 34 respondents (97.14 % ) have positive self-esteem. From the data, can be obtained that  $\alpha = 0.004$  that  $\alpha \leq 0.05$ . So H0 rejected and H1 is accepted that means there is relationship between parent's care patterns and pre school age children's self esteem in TKIT Ar-Ruhul Jadid. **Discussion:**For all parents, is expected to be nurturing their children positively so the children will have the personality which is positive, more independent,mature and can they can appreciate theiselves properly.

**Keywords:** *parents' care patterns, preschool children's self esteem*

## INTRODUCTION

Childhood is the longest in the length of life, at the moment that individual relatively powerless and dependent on others. The son of a preschool (3 to 6 years) is the golden period for children, whereby on this period kids are really sensitive to absorb all information nearby especially from the family or parents (Cecily L Betz, 2002). At the age, a child has awareness of itself as a man or woman, can arrange oneself in defecation (toilet training), and knowing some stuffs that are considered to be dangerous or harm himself (Syamsu, 2008).

The family environment is very important to the development of children's self esteem. A child who is grown in harmonious and religious family, their parents give affection, attention and guidance in family life, that the development of children's self esteem has tended to be positive. And a child who grew up in broken home family, lack of harmony, parents stern against children or parents who ignore religious values in their family, the development of children's self esteem likely to be distorted or experiencing abnormality in adjustment himself (maladjustment). Whereas nowadays many parents still be rude, authoritarian for their children, without considering the impact of experience by children (syamsu, 2002).

Parents' care pattern plays an important role in building children's self esteem. Care pattern or attitude of individual will give various behavior pattern or the work individual. By understanding or knowing attitudes of individuals, it is estimated that response or behavior to be taken by individual. In this case parents' care pattern or

parents' attitude plays a very important role in building children's self-esteem (saifuddin, 2008)

Based on research conducted by Sandra Pebrianti and friends stated that there was a relationship between parents' care pattern and mental disorder. Based on the research above, parents' care pattern in children's early-age plays an important role in the emerge of mental disorder in the following period. A family is a microsystem environment that determines children's personality and mental health. When children are grown up with a good pattern care they will develop and grow up well.

Nowadays the traditional family's pattern care whereby the husband work for the family, while a wife who takes care of households and children have changed a lot (syamsu, 2002). The tuition fees and economic crisis hit indonesia requires parents to work harder. So the main task of parents especially mothers, educate and care is becoming not optimum, in order the parents' attention and affection is reduced. The less supportive environment caused the negative effects for children's growth and development in the future.

A positive impact of parents' care pattern on children, so children will become optimistic, brave, and capable of socializing with others. It can be characterized by the children who have confidence, easy sociable with others, answering questions, and play actively with their friends. While a negative impact on parents' care pattern therefore they would tend to be passive, not confident, even depressed. It can be characterized by the children are not capable in socializing

with their friends, afraid of answering when being asked, and inactive in playing in group, quiet, put suspicious of what remains in others (Saifuddin, 2008).

From the phenomenon above, parents should not behave negatively to their children since the impact caused is very significant in decreasing childrens' self esteem. Parents should always behave positively for children to improve children's positive self esteem. The positive parents' care pattern could be shown by being gentle on children, giving freedom for them to play on the appropriate development, don't behave authoritarian, and becoming good role model in daily activity. In this case nurses must have the confidence, not feel inferior, restraint, not to blame, criticized, or even embarrass patients or family. Besides, a nurse can provide information to family and community about the importance of good pattern care and its impact on children's self esteem.

From the statement above, it appears that the role of parents affect children's growth and, either physically or mentally especially at pre-school age. Based on the phenomenon above the researcher is interested in doing research entitled the relationship between parent's care patterns and pre school age. The purpose of this research is to know the relationship between parent's care patterns and pre school age.

## MATERIALS AND METHODOLOGY

This research uses descriptive analytics. The design study of correlation by adopting cross sectional. The independent variable is parents' care pattern and the dependent variable is children's self esteem at preschool

age. The population was parents of children aged pre schools in TKIT Ruhul Jadid Sengon of 46 parents. The samples are parents of children aged pre schools in TKIT Ruhul Jadid Sengon were 35 parents who in accordance with research's criteria, used purposive sampling. An instrument used a questionnaire and structured interview on both variables. Pattern care analysed is authoritarian, permissive, and authoritative pattern care. While the children's self esteem aged preschool that analyzed is low self-esteem and high self esteem. Then the researcher tested the problems with the statistical tests the spearman rank with a significance level 95% ( $\alpha < 0.05$ ).

## RESULTS

Table 1 The frequency distribution on characteristics of respondents based on age parents in TKIT Ar Ruhul Jadid Sengon Jombang

No	Age	Number	Percentage (%)
1	20-30 year	3	8.57
2	31-40 year	30	85.72
3	41-50 year	2	5.71
Total		35	100

Source: Data Respondents

Tabel 2 The frequency distribution on education level of parents in TKIT Ar Ruhul Jadid Sengon Jombang

No	Education Level	Number	Percentage (%)
1	Junior High School	1	2.86
2	Senior High School	13	37.14
3	University	21	60
Total		35	100



Tabel 3 The frequency distribution on characteristics of respondents based on the order of sequence in TKIT Ar-Ruhul Jadid Sengon Jombang

No	Order of Sequence	Number	Percentage (%)
1	1	12	34.29
2	2	18	51.43
3	3	4	11.43
4	4	1	2.85
Total		35	100

Tabel 4 The frequency distribution on characteristics of respondents based on parents' care pattern in TKIT Ar-Ruhul Jadid Sengon Jombang

No	Care Pattern	Number	Percentage (%)
1	Authoritative	26	74.29
2	Permissive	9	25.71
3	Authoritarian	0	0
Total		35	100

Tabel 5 The frequency distribution on characteristics of respondents based on students' self esteem in TKIT Ar-Ruhul Jadid Sengon Jombang

No	Care pattern	Number	Percentage (%)
1	Positive	34	97.14
2	Negative	1	2.86 %
Total		35	100

Based on statistical tests with spearman rank, obtained  $\alpha = 0.004$  namely  $\alpha \leq 0.05$  so  $H_0$  is rejected and  $H_1$  is accepted, it means that there is relationship between parents' care pattern and preschool children's self-esteem in TKIT Ar Ruhul Jadid Sengon Jombang.

## DISCUSSION

Based on table 4 that the parents' care pattern which is authoritative (74.29%). According to Syamsu (2002) a child whose parents are authoritative, usually either parent and children has equal opportunities to convey an idea, an idea or opinion to reach a decision. Thus parents and children can discuss, communicate, or debate constructively, logical, rational to reach an agreement since the communication between parents and children can be fun, that there will be a good personality development in children. They will be independent, and could appreciate themselves. This is supported that age parents (85.72%) between 31–40 years, and parents' education level (60%) university level, where in educating children can run well because of parents' age and education level would affect someone's personality who will be influenced the way of educating children. The most important is to not let parents' personality influences excessively. And (51.43%) the sequence of birth of a 2<sup>nd</sup> child, so parents have experienced how to educate children.

It can be found that (97.14%) have positive self-esteem, and (48.57 %) was 6 years, when the increase of someone's age will make the possibility of someone's self-esteem higher because of several self-ideals they achieved. According to Stuart & Sundeen (1991) that matters affecting positive self-esteem is someone that is received by, recognized by others is able to face life, they feel that they could control their life, having good interpersonal relationship

and successfully and vice versa. Self-esteem is influenced by the formation of early self-esteem and the receipt of self ideal, for example age. In addition many experiences that will be able to be used as provision to face the life transition

Based on the results of statistical tests the spearman rank obtained  $\alpha = 0.004$  namely  $\alpha < 0.05$  so  $H_0$  is rejected and  $H_1$  is accepted, which is there is relationship between parents' care pattern and preschool children's self esteem in TKIT Ar-Ruhul Jadid Sengon Jombang. From table 4 shows that (74.29%) authoritative pattern care and from table 5 or (97.14%) obtained that they have positive self-esteem. This is because children are capable of being set all thought, attitudes and actions well. In addition according to Stuart & Sundeen (1991) that matters affecting positive self-esteem is someone is received, recognized, and appreciated by others, someone is able to face life, they could control their own life, having good interpersonal relationship and was successfully and vice versa. Based on the research Fitriana (2007) stated that there was a relationship between pattern care perception and teens' self esteem.

This opinion is supported by Sari (2008) as she said that there was the relationship between pattern care and mental health, more parents educate their children lower teenagers' mental health. Sandra Pebrianti and friends (2009) said that there was a relationship between pattern care and mental disorder. Based on it, parents' care pattern in children's early life plays an important role in the emergence of mental disorder in the following days. A family is a microsystem

environment that determines children's personality and mental health. When child brought up with a good care pattern, children will grow up well.

## CONCLUSION AND RECOMMENDATION

### Conclusion

Based on the result of the research and the discussion on previous chapter so can be concluded that children's self esteem can be increased by authoritative care pattern.

### Recommendation

For all parents are hoped that always educate their children with positive care pattern that they will have positive personality, independent, mature and can appreciate themselves.

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# THE INFLUENCE BRAIN GYMNASTICS ON THE DEVELOPMENT LEVEL OF CREATIVITY IN PRESCHOOL CHILDREN AT KINDERGARTEN DHARMA WANITA KRATON DISTRICT OF YOSOWILANGUN LUMAJANG

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## **ABSTRACT**

**Introduction:** Creativity is one of the child's potential and needs to be developed early on. One way to develop children's creativity level is by doing brain gymnastics, because brain gymnastics stimulates brain working synergy of right and left brain, right brain which plays a role in a person's intuitive and creativity. Brain gymnastics is an exercise that is strung over body movements are dynamic and crosses. The purpose of this study was to analyze the influence of brain gymnastics on the development of the level of creativity at preschool children (4–5 years). **Method:** This research uses design of one group pre-post test, in which respondents were given the treatment and the level of creativity tests performed before and after brain gymnastics to test data analysis Wicoxon Sign Rank Test in SPSS. Samples were preschool children (4–5 years) in kindergarten Dharma Wanita Kraton District of Yosowilangun Lumajang taken using simple random sampling technique. **Results:** The Results showed that changes in the level of creativity of post experiment (100%) the respondents. Respondents to the level of creativity was as much as 11 samples which were for experimental post all samples undergo changes in the level of creativity is high (100%). Respondents were lower levels of creativity as much as 4 samples which were for experimental post all samples undergo changes in the level of creativity was (100%). Results of analysis of the data showed brain gymnastics influence on the development level of creativity preschoolers. To test the effect of brain gymnastics on the level of creativity of preschool children within 1 month (30 days) obtained test results calculated  $p = 0.000$  (with  $\alpha = 0.05$ ), as  $p < 0.05$  then  $H_0$  is rejected

and  $H_1$  accepted. **Discussion:** The influence brain gymnastics on the development level of creativity of preschoolers showed that encourages balance gymnastics activity of both hemispheres of the brain simultaneously. Expected potential of both hemispheres will be balanced so that the child's intelligence also maximized. Creativity needs to be developed since preschool because a period of 5 (five) first year of life is as the Golden Age/the Golden Period or Window Opportunity or Time Critical and to create a child can manifest it self and this is a necessity human subject.

**Keywords:** *brain gymnastics, creativity, preschool children*

# THE EFFECTIVITY OF GIVING STERIL DRY GAUZE AND TRIPLE DYE ON THE DURATION TIME OF UMBILICAL CORD SEPARATION

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## ABSTRACT

**Introduction:** The indicator that influence the separation of umbilical cord is influenced by the method of treat umbilical cord that can be use steril gauze or triple dye. Whith the time of separation less than 5 day (quick), 5 until 7 days (normal), more than 7 days (slow). The purposes of this research were to determine the effectivity of giving steril dry gauze and triple dye to the duration time of umbilical cord separation. **Method:** This research used pra-experimental design post-test only. The samples of this research were 80 respondents in neonatus room of Muhammadiyah Gresik hospital that used non probability purposive sampling. Data were collected from observation and checklist and than analized using Mann Whitney test with the significance  $p < 0.01$ . **Results:** The result of this research was the separation of umbilical cord on the babies who treated with steril dry gauze were more faster than the babies who treated with triple dye ( $p = 0.000$ ). **Discussion:** Umbilical cord treatment using steril gauze was more efective because of steril gauze has loose fibers that make air easier to pass through, the air make umbilical cord dry quickly and than separated.

**Keywords:** *umbilical cord treatment, steril gauze, triple dye, time separation of umbilical cord*

## INTRODUCTION

Umbilical cord is the life line for the fetus during pregnancy (Sodikin, 2009). To prevent infection needs to be treated cord (Aziz, 2009). In the Muhammadiyah Gresik Hospital, cord care was used triple dye with the separation time of umbilical cord between 7–14 days, whereas for cord care with dry sterile gauze has not been done.

The incidence of tetanus neonatorum in Indonesia is still quite high compared to other ASEAN countries that still there are 137 cases in 2011, which consisted of 28 cases (20.44%) using caring umbilical cord with alcohol or iodine and 57 cases (41.61%) due to cord care in the traditional way (Depkes RI, 2011). The release cord varies within 3 days, 5 days, 7 days and there are up to 2 weeks depending on the method used cord care (Gultom, 2004). From the initial data collection was done in neonatal room the Muhammadiyah Gresik hospital showed that from January to April 2014 there were 11 (2.2%) infants were exposed to the infection of 499 infants admitted in neonatal room the Muhammadiyah Gresik hospital and two of them happen umbilical cord infection.

According to Depkes RI, 2005 cord care is divided into two: cord care by using the old method of wrapping and antiseptic (70% alcohol and betadine 10%) and new methods of treatment of the umbilical cord is dry cord care where the umbilical cord wrapped only dry sterile gauze and condition the cord stay dry. Prevention of umbilical cord infections can be done by giving triple dye to the umbilical cord (triple dye is a mixture of brilliant green of 2.29 g, 1.14 g piry lapine bernilsulfate and cristal violet 2.29 g dissolved in one liter of water).

From several methods of the umbilical cord treatment and the background on top, researchers interested in conducting research on "Duration time of cord release using dry sterile gauze and triple dye."

## METHOD

The type of this research was Pre-Experimental Design kinds Post Only Design. To determine the effectiveness of the influence of dry sterile gauze and triple dye to the length of the time release cord. This research was conducted in the neonatal Muhammadiyah Gresik Hospital in October–December 2014. The population in this study were all newborns treated in neonatal Muhammadiyah Gresik Hospital, amount of 100 infants with non-probability purposive sampling of 80 respondents. Instruments used the form of SAP, observation sheets, leaflets and checklist. Data already collected and analyzed using Mann–Whitney Test with SPSS 16.00 for windows to determine the significance level.

## RESULT

Table 1 the effectiveness of sterile dry gauze on the duration of umbilical cord separation in neonates room Muhammadiyah Hospital Gresik In October–December, 2014

No	Time	f	%
1	Quick (< 5 days)	3	7.5%
2	Normal (5-7 days)	32	80%
3	Slow (> 7 days)	5	12.5%
Total		40	100%

Primery Data, October-December 2014.

The table above explained that the duration of umbilical cord separation on respondents who were treated using dry sterile gauze showed that almost all respondents 32 people (80 %) in the normal time (5–7 days).

Table 2 Effectiveness Triple Dye to Duration Time of Separation Umbilical Cord

No	Time	f	%
1	Fast (< 5 days)	1	2.5%
2	Normal (5-7 days)	4	10%
3	Slow (> 7 days)	35	87.5%
Total		40	100%

Primery Data, October–December 2014

Table 2 showed that respondents who were treated by using triple dye almost 35 respondents (87.5%) entirely > 7 days (slow).

Table 3 Differences Effectiveness Sterile Dry Gauze and Triple Dyeto Duration Time of Separation Umbilical Cord at Neonates Muhammadiyah Gresik Hospital in October–December 2014.

	The Duration Time						Total	Mean	Mean Difference
	Fast		Normal		Slow				
	f	%	f	%	f	%	f	%	
Steril dry gauze	3	3.75%	32	40%	5	6.25%	40	50%	7 days
Triple dye	1	1.25%	4	5%	35	43.75%	40	50%	9 days
Total	4	5%	36	45%	40	50%	80	100%	16 days

Mann Whitney Test:  $\rho = 0.000$   $\alpha = 0.05$

Table 3 explained that the infant's umbilical cord which treated by using triple dye, the duration time release slower than in fant'sumbilical cord which treated by using a sterile dry gauze.

## DISCUSSION

The results showed that the umbilical cord care performed using a sterile dry gauze, data obtained almost entirely normally. A gauze or in the form of woven gauze hydrophiliclose, big-eyed, cotton fabric which can absorb liquid well (Suryani & Wahyudi, 2005).

Gauze has a wide fiber so easily passed air, gauze pads can help speed up the process of releasing cord in the process requires a media release air that dries quickly and detached. Using sterile gauze pads can facilitate air circulationis more stable and betteras well as more practical and economical, and no visible signs of infection when treating the umbilical cord using sterile gauze.

The results showed that nearly all infants umbilical cord was treated with triple dye the separation were slow time. Triple dye is one antiseptic. Tripledye is a fluid combination of brilliant green, crystal violet, and proflavine Hemisulfate. This solutionis bactericidal which can killgram-positive and gram-negative bacteria.

The duration of cord separation by using triple dye can be affected by the use of antiseptics and infection. Antiseptics can reduce the amount of non-pathogenic flora around the umbilicus normal. This decrease in the number of leukocytes extend the healing process and preventing disconnection cord (Davies, 2011). Applying an antiseptic triple dye and can accelerate time to release the cord but it was not statistically significant when compared with the let cord dries it self (Sodikin, 2009).



Based on statistical test Mann Whitney found no difference in effectiveness of dry sterile gauze and triple dye to the length of time the release cord. Where  $p = 0.000$  value obtained these results indicate that the value of  $p$  is smaller than  $\alpha$  of 0.05. From the above data it was known that  $H_0$  refused and  $H_1$  accepted. Which means that the release of the umbilical cord that was treated with dry sterile gauze 2 days faster than with treatment with triple dye. With an average time of release of 7 days (normal) on treatment with dry sterile gauze and 9 days (slow) on treatment with triple dye. Results of this study found that the release of the umbilical cord using sterile gauze to dry faster than the triple dye. This is consistent with the theory that the more easily traversed gauze air so that the cord stay dry, which in turn could speed up the process of releasing the cord. Where at the moment the umbilical cord is cut the blood supply from mother to fetus stopped, causing the cord does not receive blood flow causes tissue necrosis and dries, hardens and blackened where the process is accelerated by frequent exposure of the cord with air and eventually detached umbilical cord. While the provision of triple dye to the umbilical cord is bactericide which causes a decrease in the number of non-pathogenic flora around the umbilicus normal, decreasing the number of leukocytes which makes the length of the healing process and the termination of the umbilical cord.

## CONCLUSION AND RECOMMENDATION

### Conclusions

A neonatal who do cord care using sterile gauze to dry off more quickly than babies who use umbilical cord was treated by using triple dye.

### Recommendation

It is expected that health professionals, especially nurses can perform maintenance umbilical cord with dry sterile gauze and more often provide counseling to mothers who had just given birth on cord care using treatment methods that have been set by the government, namely with sterile gauze. Hospitals can implement cord care using dry sterile gauze.

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# EXTENSION EFFECT OF ELEMENTARY STUDENTS AGAINST SKILLS IN BRUSHING TEETH

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## ABSTRACT

**Introduction:** Brushing the teeth in the proper way to clean teeth from left overs effectively. But the skills of children about brushing teeth still lacking . This is due to a lack of understanding about how to brush their child's teeth properly . One way to improve the children's skills in brushing teeth is through counseling with the demonstration method . This study aimed to determine the effect of education on the level of skills of brushing your teeth. **Method:** This study used an experimental research design with the design posttest -only control design, the number of sample were 65 the experimental group and the control group of 65 people with stratified random sampling technique. The independent variable was the counseling, the dependent variable was the skill brushing teeth. Collecting data using the check list sheet. Data were analyzed using Mann Whitney test with a 0.05 significance figures. **Result:** The result showed the skills level of brushing teeth in the control group of 65 children (100%) is said to be unskilled, whereas the experimental group a total of 61 children (94 %) is said to be skillful and 4 children (6 %) Unskilled after being given counseling . After analyzed by Mann Whitney test obtained  $p = 0.000$  means  $p < \alpha$  , then  $H_0$  is rejected and  $H_1$  accepted. It showed there is a difference between the skills of brushing teeth with a given extension is not given counseling to children grade 3 , 4 and 5 in SDN Pakis II Surabaya. **Discussion:** Differences in skill levels of children in brushing teeth showed effective counseling is done. This is because in the process of counseling conducted demonstrations so as to improve the children's skills in brushing teeth. The school can collaborate with health centers to hold regular counseling by the method of demonstration.

**Keywords:** *counseling, skill brushing teeth , elementary school children*

## FACTORS ASSOCIATED WITH OBEDIENCE OF THE PRIVATE MIDWIFE PRACTICE IN RECORDING AND REPORTING THE MATERNAL AND CHILD HEALTH SERVICES IN MALANG OF EAST JAVA YEAR 2014

**DiadjengSetyaWardani**

### **ABSTRACT**

**Introduction:** The Health Office of East Java Province obliges private midwives to fill a provided form and report it to a health center every month. The report consists of the following indicators: number of first and fourth visit on pregnant women group, number of labour, number of postpartum, number of lifebirth and deadbirth, number of new and old visit on children under five years group, number of immunization, number of mother and child who are referred, and number of family planning services. The result of recording and reporting could be used to value a health status and health degree at an area. By completing and submitting the report timely, data of maternal and child health status could be assessed and observed in accordance with a condition at that time and could be determined a priority for further action. Finally, each problem could be early detected and handled well. But it turns out that policy can not fully run in accordance with the procedure . The midwife is already aware of the policy but not fully perform well . In the execution of Midwives do not fill out the form with complete reporting and not reporting timely recording. The objective of this research was to determine the factors associated with reporting and recording obedience of private midwife practice in maternal and neonatal services.**Method:** This was an observational research with survey method and cross-sectional approach. The research instrument used a structured questionnaire. Number of sample was ninety midwives. Data were analyzed quantitatively using the methods of univariate, bivariate, and multivariate analysis (Logistic Regression Test using software of SPSS version 17.**Result:** Research results showed most respondents have a service life of > 5 years (90,7 %) , midwives have good knowledge about reporting and recording program (50,7 %), midwives have good motivation (52 %), midwives have the good perception about recording and reporting procedures (52 %), midwives have good perception about supervision (54.7 %), and they have perception that public health facilities provided inadequate (66.7 %).Results of the analysis of the relationship  $p\text{ value} < 0.05$  indicates correlation between work period ( $p\text{-value} = 0.039$ ) , procedures ( $p\text{-value} = 0.030$ ), and motivation ( $p\text{-value} = 0.0001$ ) with obedience. Results of multivariate logistic regression analysis ( $p\text{-value} < 0.05$ ) showed that

the motivation ( $p\text{-value} = 0.0001$ ) and procedure ( $p\text{-value} = 0.004$ ) had an influence together to obedience of Midwives. **Discussion:** As a suggestion, Head of the Health Centers should complete facilities for improving the midwives' motivation and for supporting the success of recording and reporting program regarding on maternal and child health.

**Keywords:** Obedience, Midwife, Recording and Reporting, The Maternal and Child Health Services.

# THE EFFECT OF PROGRESSIVE MUSCLE RELAXATION ON ANXIETY LEVELS IN THE THIRD TRIMESTER PREGNANT WOMEN

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## ABSTRACT

**Introduction:** Pregnancy is a physiological state in which occurs the changes experienced by the mother, both physical and psychological changes. Physical and psychological changes experienced by pregnant women will often cause anxiety. Pregnant anxiety can be reduced by giving progressive muscle relaxation. This study aimed to identify the effect of progressive muscle relaxation on anxiety levels in the third trimester pregnant women. **Method:** The study design used was quasi experiment. Samples were collected using purposive sampling, the number of samples used were 20 respondents that were divided into two group: the treatment group (10 respondents) and the control group (10 respondents). The independent variable was progressive muscle relaxation and the dependent variable was anxiety levels in the third trimester pregnant women. Data were collected using questionnaire. The data were analyzes using Wilcoxon Signed Rank Test and Mann Whitney U-Test with significance level of  $p < 0.05$ . **Result:** The result showed that progressive muscle relaxation had an effect on anxiety levels in the third trimester pregnant women. In treatment group, the anxiety level had significance  $p = 0.005$ , in control group  $p = 0.060$  and Mann Whitney U-Test  $p = 0.045$ . That means progressive muscle relaxation had an effect on anxiety levels in the third trimester pregnant women. **Conclusion:** It can be concluded that progressive muscle relaxation can give effect on anxiety levels in the third trimester pregnant women. Further research should be conducted with larger samples.

**Keywords:** anxiety level, progressive muscle relaxation, third trimester pregnant women

# THE EFFECT OF ENDORPHIN MASSAGE ON CERVICAL DILATATION RATE AT ACTIVE PHASE ON FIRST STAGE LABOR IN PRIMIGRAVIDA WITH LABOR INDUCTION AT SIDOARJO HOSPITAL

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## ABSTRACT

**Introduction:** Cervical dilatation rate at active phase on first stage labor in primigravida longer than multigravida. An intervention that can be given to accelerate cervical dilatation was endorphin massage. This massage can increase endorphin hormone and endogenous oxytocin that lead to uterine contractions, so as to accelerate cervical dilatation. The purpose of this study was to analyze the effect of endorphin massage on cervical dilatation rate at active phase on first stage labor in primigravida with labor induction. **Method:** Design used for this study was quasi experimental. The population of this study was primigravida mothers who birthing in VK Peristi, Sidoarjo Hospital. The sample size in this study were 20 respondents primigravida with misoprostol or oxytocin drip as main intervention. The sampling technique used was purposive sampling. The independent variable was endorphin massage, while the dependent variable was cervical dilatation rate. The instrument used was partograf observation sheet. Statistical test using independent t test with significance level  $\alpha \leq 0.05$ . **Result:** The result of independent t test showed  $p = 0.000$  means that there was effect of endorphin massage on cervical dilatation rate at active phase on first stage labor in primigravida at Sidoarjo Hospital. **Discussion:** The result of this study can be used as a complementary intervention in the management procedures of active phase of labor to accelerate cervical dilatation.

**Keywords:** *endorphin massage, labor induction, oxytocin, misoprostol*

# THE BEHAVIOR OF PRE ELDERLY WOMEN MENOPAUSE IN THE REGION OF PUSKESMAS KENJERAN

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## **ABSTRACT**

**Introduction:** Menopause is part of aging process that occurs in women. The process involved physiological and psychological aspects. Menopause needs more attention on the health of women, especially elderly women which experienced in menopause. This study aimed to analyze the factors affect to behavior of women who experience in menopause.

**Method:** The study design was descriptive analitic. Sample in this study was 36 respondents aged 45–59 years. Independent variable in this study were factors related to the behavior of pre-elderly women knowledge namely attitudes, beliefs, and values. Dependent variable study was the behaviour of pre-elderly women who experienced menopause. Data were analyzed used Spearman rho correlation test with  $\alpha < 0.05$ . **Result:** The result of statistical analysis with spearman rho correlation test indicates that the level of knowledge ( $p = 0.001$ ) and attitudes ( $p = 0.0027$ ) had correlation with the behavior of pre-elderly women. Beliefs ( $p = 0.263$ ) and values ( $p = 0.762$ ) had no corelation with the behavior of pre-elderly women who experienced menopause. **Discussion:** It can be concluded that knowledge and good attitudes can increase the good behavior, while values and beliefs had no related with the behavior of pra-elderly women who experienced menopause. Further action for this study are expected to be health counseling to pre elderly women about menopause.

**Keywords:** *attitudes, behavior, beliefs, knowledge, menopause, values*



## BACKGROUND

The aging process results in the increasing vulnerability of the body against a disease caused by a wide variety of physiological changes in the body that lasts over time that ends with death (Azizah, 2011). Menopause is a normal phase of life that will be experienced by every woman, however some physiological changes may occur. Such vasomotor, urogenital, somatic and psychological changes. Various complaints experienced by women who are not menstruation after 6 months to 12 months (Muaris, 2003). Most complaints will disappear itself, but some of them will decrease the quality of life and cause discomfort that can interfere work or daily life (Soedirham, et al, 2008). Knowledge, attitudes, beliefs and values are included in the predisposing factors which as the precursor of behavior and one of the factors that influence the behavior besides supporting factors and driving forces (Green, 1991).

However, other factors related to the behavior of women who experience menopause cannot be explained. The average age of Indonesian women menopause is 50–51 years old (Hendarto, 2007). Baziad (2003) estimated in 2020 the population of Indonesia reached 262.6 million (8.67%) of the total of 30.3 million women living in menopause. Of course it needs to be more attention to their health, especially reproductive because at this time the physical and psychological changes that can cause a variety of health complaints.

According Nurdono (2013) negative attitudes in the form of anxiety can occur in women with menopause. Some women

considered taboo and not many know premenopausal symptoms due to lack of knowledge and understanding of the changes that occur. Uncomfortable attitude while in the premenopausal period increasing. The negative attitude shown menopausal women are submissive or neglect complaint felt. According to Herrera et.al (2002) women who have negative religious beliefs and spiritual have a greater risk for depression. Perception and acceptance of women to the menopause influenced by their values, beliefs, and cultures (Melby, Lock, & Kaufert, 2005).

Ministry of Health (2003), elderly posyandu aims to improve the elderly's health and quality of life in accordance existence to reach old age happily and efficiently in the family and society. According to the National Commission on Disabilities (2010) Integrated Service Post (Posyandu) is a service to elderly Elderly formed and implemented together with the NGO community, across the government sector and non-governmental, and others. Promotive and preventive efforts with more emphasis on health care. Zasri (2012) reduced levels of maternal anxiety in the face of menopause will make it more ready to accept the arrival of menopause.

## METHOD

This study was descriptive analytic with cross sectional approach. Population in this study was all pre elderly women (aged 45–59 years) living in Puskesmas Kenjeran, Surabaya, which amounted to 5,961 people. The sampling technique used was a multi-stage cluster sampling, with the inclusion criteria 1) pre elderly woman who did not

menstruate for  $\geq 12$  months, 2) able to read and write. The number of sample size was 36 respondents.

Instruments in this study used a questionnaire covering demographic data in the form of an introductory questionnaire respondents and questionnaires knowledge, attitudes, beliefs, values and behaviors. The

study was conducted on 18–29 May 2015, in RW 1 Village Kenjeran, District of Bulak, Surabaya. Data collected by home visit. Questionnaires carried out independently by respondent and accompanied by researchers. Statistical analysis used was Spearman rho correlation test with significance level  $< 0.05$ .

## RESULT

Table 1. Characteristics of Respondents

Characteristics	Criteria	f	%
Age	45 – 50 years old	5	13.9
	51 – 55 years old	15	41.7
	56 – 59 years old	16	44.4
Education	Elementary school	23	63.9
	Junior highschool	3	8.3
	Senior highschool	8	22.2
	Bachelor	2	5.6
Job	Housewife	22	61.1
	Trader	8	22.2
	Private	4	11.1
	Public official	2	5.6
Tribe	Madura	10	27.8
	Jawa	26	72.2
Marrital Status	Married	27	75
	Not married	1	2.8
	Widow	8	22.2

n 36 100

In table 1 shows that the majority of respondents age in this study between 56–59 years as many as 16 people (44.4%). Most of the education level of respondents was primary schools as many as 23 people (63%). Type of work the majority of respondents are housewives as many as 22 people (61.1%). Most of respondents tribe was Javanese 72.2%. Most respondent status was married as many as 27 people (75%).

Table 2 Knowledge and behavior analysis of pre elderly woman

Knowledge	behavior of pre elderly woman						Total	
	Good		Fair		Less		Σ	%
	f	%	f	%	f	%		
Good	5	13.89	3	8.33	0	0	8	22.22
Fair	8	22.23	4	11.11	2	5.56	14	38.89
Less	1	2.87	7	19.45	6	16.67	14	38.89
Total	14	38.89	14	38.89	8	22.23	36	100
Spearman Rho $r = 0.538$ $p = 0.001$								

Table 2 shows that 5 respondents (13.89%) have good knowledge with good behavior. But there were 6 respondents with less knowledge had less behavior. Results of correlation  $r = -0.538$  and  $p = 0.001$ . P-value less than 0.05, which means that H0 rejected and H1 accepted. That showed there no correlation between knowledge and behavior of pre elderly women who experience menopause.

Table 3 Attitude to the behavior analysis of pre elderly woman

Attitude	behavior of pre elderly woman						Total	
	Good		Fair		Less		Σ	%
	f	%	f	%	f	%		
Very Good	8	22.22	5	13.89	1	2.78	14	38.89
Good	6	16.67	10	27.78	6	16.67	22	61.11
Total	14	38.89	15	41.67	7	19.45	36	100.00
Spearman Rho $r = 0.370$ $p = 0.027$								

Table 3 shows that 8(22.22%) respondents had very good attitude with good behavior. But there was one respondents with very good attitude less behavior. Results of correlation  $r = -0.370$  and  $p = 0.027$ . P values greater than 0.05, which means that H0 rejected, H1 accepted and showed no correlation between attitude and behavior of pre elderly women who experience menopause.

Table 4 Analysis of beliefs to behavior of pre elderly woman

Beliefs	behavior of pre elderly woman						Total	
	Good		Fair		Less		Σ	%
	f	%	f	%	f	%		
Positif	13	36.11	14	38.89	8	22.22	35	97.22
Negatif	1	2.78	0	0	0	0	1	2.78
Total	14	38.89	14	38.89	8	22.22	36	100

Spearman Rho  $r = -0.192$   $p = 0.263$

Table 4 shows that 8 (22.2%) respondents with less behavior. There are 1 respondents with negative beliefs have good behavior. Results of correlation  $r = -0.192$  and  $p = 0.263$ . P values greater than 0.05, which means that H1 is rejected and H0 showed no correlation between beliefs with the behavior of pre elderly women who experience menopause.

Table 5 Analysis of the value with behavior of the pre elderly woman

Value	behavior of pre elderly woman						Total	
	Good		Fair		Less		Σ	%
	f	%	f	%	f	%		
Positif	13	36.1	14	38.9	8	22.2	35	97.2
Negatif	0	0	1	2.8	0	0	1	2.8
Total	14	36.1	14	41.7	8	22.2	36	100

Spearman Rho  $r = 0.052$   $p = 0.762$

Table 5 showed the 8 (22.2%) respondents with positif value and less behavior. 1 respondents with a negative value had fair behavior. Results of correlation  $r = 0.052$  and  $p = 0.762$ . P values greater than 0.05, which means H1 rejected and H0 accepted, showed no correlation between the value with the behavior of pre elderly women who experience menopause.

## DISCUSSION

Good level of knowledge will improve the behavior in the pre elderly woman who experience menopause. Responden who had sufficient and less knowledge category because the majority of respondents background of education elementary school. The level of education would be related to

the person's level of knowledge, because in the education there are learning process as an experience or training in problem solving or seek alternative solutions to overcome the perceived health problems. The higher one's education level, the more quickly to receive information, and ultimately affect the person's behavior. In line with type of

work of pre elderly women who experience menopause, majority are housewives with an average level of knowledge sufficient and less. Housewife occupation often associated with someone who always stay at home with lack exposure to information from the outside, that could affect the knowledge about menopause. Knowledge is one of the domains of behavior but increased knowledge does not necessarily lead to changes in behavior (Green, 1991).

Knowledge related to the behavior shown by the respondents, although no respondents showed different conditions. Respondents whose knowledge level was less and had elementary school education background, but the behavior good. At respondents with elementary school education but had good knowledge and behavior in fair category. This can be due to personal experience and the resources they had. Personal experience can be derived from an exchange of opinions and ideas between friends, relatives or health workers.

Attitude in this study was the verbal expression of respondents to the behavior during menopause. Attitude in this study included respondents feeling when experiencing menopause either positive or negative, the acceptance condition of the body after menopause and responsibilities held to maintain good health after menopause. Some components such as beliefs, confidence, evaluation, emotional life of a person against an object as well as the tendency to act which is a component that precedes the action or overt behavior. Knowledge, thoughts, beliefs and emotions play important role making attitude intact.

Furthermore, in other words the attitude predisposes behavior closed reaction and has not been functioning as an open reaction (Notoadmojo, 2007). Attitude is one behavior factor precursor in pre elderly women.

Attitude can be said as positive if respondents agreed to accept circumstances after menopause well. A positive attitude will lead respondents more positives in daily activities in the more advanced age. Such activities make respondents more often to meet and hang out with people who have a positive impact. Majority of respondents had good and very good attitude category agreed on by both menopause and accept the situation. The attitude of the respondents were very good but the behavior of respondents still less, with the level of undergraduate education and knowledge enough. Personal experience less correlation to menopause, lack of socialization and interaction with friends, family or neighbors. Respondents do not know to behave good when experiencing menopause. Some respondents indicated had good attitude, but less behavior category. Respondents with less behavior because the majority of respondents had elementary school background and as a mother household. They had minimal knowledge about menopause due to limited exposure information received.

Almost all respondents had positive beliefs about menopause, only one respondent had negative beliefs. Positive beliefs means trust in positive things about menopause and do not negative in things. According to Soedirham (2008), menopause was considered reasonable as a natural thing for all women. The public also

consider that menopause is a process to be old not to be feared and must be dealt with wisely. More community considers that menopause is natural at this stage of a certain age so they tend not to talk about menopause more. Some respondents expressed menopause affects the marital relationship, but it occurs naturally in recognition of increasingly older age.

Almost all respondents had positive value, only one respondent who had negative value. Positive value means that respondents agreed that good values and have been embraced by most people in everyday life of the menopause. Value in this study was measured using parameters that views or thoughts about individual desired and values lead to behavior that is displayed menopause. A woman will be closer to God, spiritual beliefs better after menopause. The majority of respondents were Javanese, this gives sincere culture and feeling pressured by the partner of a woman embracing Java that the wife may not exceed husband. The principle that the husband put so high with all the needs to be met (Wagiyo, 2005). The respondents to the value "negative" behave "reasonably" to complete primary school education/MI equal. Respondents expressed feeling less with rare spiritual belief worship because they feel lazy to do it. Respondents said not agree, that the society and people around more and more patient in his honor after menopause because the status is still unmarried. There is a sense of despair with the situation who do not have a spouse at the age of menopause, making it less attention on health.

## CONCLUSION

Good knowledge will improve the behavior of pre elderly woman while experiencing menopause. Knowledge is one of the predisposing factors of behavior. A good attitude will improve the behavior of pre elderly woman while experiencing menopause. Attitude is one of the predisposing factors of behavior.

Beliefs associated menopause does not specify the behavior of pre elderly woman while experiencing menopause. Obtained based on confidence and belief without proof of prior generations. Values that pre elderly women had about menopause does not specify the behavior of pre elderly woman while experiencing menopause. Value is derived from the way of life of a community.

## SUGGESTION

There should be public education for pre elderly women to enhance the knowledge and behavior related to menopause. Recommendations for further study is to do study with respect to pre elderly women who experience menopause with the knowledge and behavior that are still in the poor category, with method that influence health promotion to improve the knowledge and behavior of respondents currently experiencing menopause.

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# THE EFFECTIVENESS OF PLASTIC WRAPS TOWARD VITAL SIGNS CHANGES ON LOW BIRTH WEIGHT BABIES IN NEONATAL INTENSIVE CARE UNIT

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## **ABSTRACT**

**Introduction:** Thermoregulation is very essential and challenging aspect in taking care low-weight newborn baby. Normal body temperature is obtained from the balance between production and loss of body heat. One of the particular problems on newborn babies, especially on low-weight newborn babies, is their incapability to sustain normal body temperature. Plastic wrap is one method that can be used to prevent hypothermia and increase baby's body temperature, respiration rate and pulse rate, because of its low cost, easy to get and safe for the babies. The purpose of this study was to analyze vital signs changes before and after being given plastic wraps on low birth weight babies in NICU Emergency Room Soetomo General Hospital. **Methods:** This research used pre-experimental (one group pre-posttest design). Population in this research were low birth weight babies in NICU. Sampling technique was purposive sampling. Sample for this research were 30 low-weight newborn babies. Independent variable in this research was plastic wraps while the dependent variable was the vital signs changes. Data were collected by using observation sheet and was analyzed used Friedman statistics test and Wilcoxon signed rank test with  $\alpha = 0.05$ . **Result:** The result showed that there were change in temperature, respiration rate and pulse rate before and after applying plastic wraps for 30 minutes, 60 minutes, and 90 minutes by the value of  $p = 0.000$ . **Discussion:** It can be concluded that plastic wraps was effective on vital signs changes on low birth weight and premature babies. Further research, need to take longer time for plastic wraps applying.

**Keywords:** *plastic wraps, vital signs, low birth weight babies, premature babies*

## CORRELATION BETWEEN KNOWLEDGE WITH LEVEL OF ANXIETY PARENTS OF CHILDREN SUFFERING CANCER

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### ABSTRACT

**Introduction:** Cancer is one of the threatening disease. The diagnosis and treatment of pediatric cancer can be associated with psychosocial changes of their parents. Anxiety of parents happened in every time especially in the first time of cancer diagnosis was found. High level of anxiety may also caused by lack of knowledge. The purpose of this study was to analyze correlation between knowledge with level of anxiety parents of children suffering cancer. **Method:** This study used cross sectional correlative design. Population were mother from children suffering cancer in Pediatric Hemato oncologic ward RSUD DrSoetmo Surabaya. Sample were 30 respondents who met inclusion criteria. Data were collected by using questionnaire and analyze by Spearman Rank Correlation statistical test with  $\alpha=0.05$ . **Result:** The result showed that there is no significant correlation between Knowledge and Anxiety level  $p = 0.320$ . **Discussion:** It can be concluded that Anxiety level of parent caused by various factors not only knowledge. For further research need more sample and various characters of parents.

**Keywords:** *anxiety, knowledge, cancer of children*

# THE CORRELATION BETWEEN VERBAL ABUSE BY PARENTS AND THE PRESCHOOL DEVELOPMENT OF PERSONAL SOCIAL IN KINDERGARTEN MULYOREJO 1 SURABAYA

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## **ABSTRACT**

**Introduction:** Verbal abuse are all forms of speech that have the nature insult, yell, curse, scold and scare children with the words out. Personal social development includes the ability to independently, social skills, and the ability to interact with the environment. Personal social development in preschool can be influenced by parenting, there are interactions between parents and children that allow verbal abuse by parents to children. The purpose of this study was to determine the relationship of verbal abuse by parents with personal social development of preschool in kindergarten Mulyorejo 1 Surabaya. **Method:** Design of this study was correlation study, with cross sectional approach. The population was parents who have preschool children in kindergarten Mulyorejo 1 Surabaya. The sample was 19 respondents taken by purposive sampling. The independent variable was the behavior of verbal abuse parents and dependent variable was personal social development of preschool. Data were collected using questionnaires and VSMS (Vineland Social Maturity Scale), then data analyzed by statistical tests spearman rank correlation with significance level  $p \leq 0.05$ . **Results:** The results showed a correlation between verbal abuse and personal social development with coefficient correlation  $r = 0.671$  and a significance level at 0.002. **Discuss:** Verbal abuse by parents have a strong relationship with the social personal development of preschool in kindergarten Mulyorejo 1 Surabaya. Further research should be done to research qualitative with deep interview method to review more details about verbal abuse by parents.

**Keyword:** *verbal abuse, personal social, preschool*

# EFFECT OF PLAY WITH COLORING WITH DECREASING MALADAPTIVE BEHAVIOR SCORE OF PRE SCHOOL CHILDREN AGED 3-5 YEARS WHICH EXPERIENCE HOSPITALIZATION IN HOSPITAL OF KEDIRI DISTRICT

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## **ABSTRACT**

**Introduction:** Play with coloring is an activity that aims to eliminate the tension and have fun at the children who experienced hospitalization by providing intervention in the form of streaks of color in the figure. Giving this intervention will provide a relaxing effect on the body and can provide emotional stimuli in the limbic system, resulting in maladaptive behavior control in the hypothalamus. Accordingly, this study aimed to determine the effect of art therapy to decrease maladaptive behavior score of pre school children (3-5 years) during the hospitalization. **Method:** The study design used is an experimental design approach to pre-test post-test with control group who provide treatment to art therapy in the treatment group, whereas the control group get a standard intervention from the hospital. Respondents in the study were aged 3-5 years amounted to 20 respondents were divided into two treatment groups and the control group. From the description, it can be seen that the independent variables in this study are art therapy, while the dependent variable is maladaptive behaviors. To obtain the data in this study used a questionnaire which was analyzed using Paired t-test and Independent t tests. **Results:** Based on Paired t test p value=0,000 is obtained which indicates that  $H_1$  is accepted. Meanwhile, the Independent t test P values obtained test p=0,032 which indicates a different result. This indicates that there are significant art therapy to decrease maladaptive behaviors score of pre schoolers (3-5 years) who experienced hospitalization in Kediri Hospital. From these results, it is suggested that pediatric nurses and parents provide interventions art therapy routine for hospitalized children, in order to minimize the child's maladaptive behavior.

**Keywords:** play with coloring, maladaptive behavior score, children aged 3-5 years old

## INTRODUCTION

The number of children hospitalized according to Wong (2001) in Lumiu (2013), has increased. Percentage of children treated in the hospital today became a problem more serious and complex more than some years ago. Mc Cherty and Kozak said nearly four million under one year children experience hospitalization (Lawrence J., in Lumiu, 2013). Hospitalization itself is a process for a reason the plan or emergency, requiring the child to stay in the hospital, undergoing therapy and care until their return back home. During this process, the child and parents can experience a variety of events which, according to some studies indicated a very traumatic experience and filled with anxiety (Supartini, 2004, in Haryani 2012).

In Indonesia, the number of preschool age children (3-5 years old) based on National Social Economic Survey (SUSENAS) for 2001 amounted to 72% of the total Indonesian population, estimated at 35 per 100 children undergoing hospitalization (Sumaryoko, in Purwandari, 2010). In relation to this, child morbidity in Indonesia based on the National Social Economic Survey (SUSENAS) 2001-2005 also mentions that in 2005 the morbidity of children aged 0-4 years was 25,84%, 5-12 years of age as much as 14,91% , aged 13-15 years 9,1%, 16-21 years of age was 8,13% (NSES, 2005, in Navianti, 2011). Isle of Wight study reported by Bernstein and Garfinkel showed 60% of children experiencing anxiety disorders, primarily because of divorces anxiety disorder, and 50% suffer from depression (Bolin 2011).

Preschoolers will show maladaptive behaviors when adapting to hospitalization that happened, this is because the child feels afraid that part of his body would change as a result of injury or actions performed on the child (Hegner, 2003). In the preschool years, maladaptive behaviors that occur in the child's hospitalization is refusing to eat, often asked, slowly crying, uncooperative toward nurse so that hospitalization becomes lost control and restriction of activity (Jovan 2007, in Rahma 2008).

Maladaptive behavior has a detrimental impact on individuals and society. Based on the concept of psychoneuroimmunology, the hypothalamic pituitary adrenal axis, said that maladaptive behavior can lead to hospitalization of children with anxiety. If the anxiety experienced by patients is very high, then the adrenal glands to produce cortisol in large quantities so that it can suppress the immune system (Clancy, 1998, in Nursalam, 2005). The presence of immune suppression is what will lead to longer treatment time, as well as accelerate the occurrence of complications during treatment.

Related with that, it is important to know the tasks or stages of child development, in order to provide treatment without causing fear or trauma. In addition nurses must also have the knowledge and skills of how to approach a child, and interact with them so that the child is cooperative to the treatment given (Adriana, 2011). Effective media solve maladaptive behavior in children when hospitalization is playing. Therefore, the provision of play activities for children in the

hospital will provide therapeutic value that can affect in the release of tension in children (Wong, 2003).

Playing with coloring (art therapy) is an alternative nursing interventions to minimize reaction appears hospitalization in children. The intervention was also one of the therapeutic modalities in the field of nursing in which nurses base patient's potential as a starting point for the process of healing (Keegan, 2001, in Purwandari 2009).

Based on the above phenomenon, the researchers were interested in conducting research on the effects of playing with coloring to decrease maladaptive behavior score preschool children (3-5 years) who experienced a hospitalization in Hospital of Kediri District.

## METHODS

The design of this study used quasy experimental with pretest-posttest approach with control grup. Sampling technique used purposive sampling. In this study used a sample of preschool children (3-5 years) who experienced a hospitalization in Hospital of Kediri District consisting of 20 respondents, 10 respondents from the treatment group and the control group of 10 respondents who had met the inclusion criteria. The inclusion criteria were included in this study is the first children hospitalized during the vulnerable period of 3-7 days, acutely ill child, the child is still in a condition to perform daily activities but need a little help from health professionals, willing to be a respondent, the approval of a parent intervention to follow from beginning to end. This research was conducted at the Hospital of Kediri District,

precisely in HVA Toeloengredjo Hospital and Amelia Pare Pare Hospital, on February 11 to February 22, 2014.

Choosing the sample done at the same time in both of the Hospital at Kediri District. In choosing sample was accompanied by a nurse researcher in determining the child's room is allowed to follow the intervention play with coloring based on the child's health status. After choosing sample, then the grouping into two groups: control groups and treatment group. Treatment group play with coloring done for 3 days each at 10.00 AM. If respondent not following the play intervention with colouring from the beginning to the end so they will be dropped out of the study.

Previous researchers explain about informed consent, the contract time, and pretest questionnaire both in the control group and the treatment group. After data collection is complete, researchers provide interventions play with coloring to the treatment group and the control group with the intervention of the standard from hospital. After 3 days researchers conducted questionnaires posttest in the treatment group and the control group. At the end of the study, researchers gave interventions play with coloring using the same method and accompanied by a parent respondents. It is intended that the principles of justice in both groups of study subjects still consistent.

## RESULTS

This following will be presented the results of research on the effect of playing with coloring with decreasing maladaptive behavior score preschool children (3-5 years) in Hospital of Kediri District.

## a. Description of Respondent's Age

**Table 1.** Characteristic of Respondent based on Age of Treatment Group

Age interval	Treatment	Control	N	(%)
3 Years	5	7	12	60%
4 Years	1	1	2	10%
5 Years	4	2	6	30%
Total	10	10	20	100%

Table 1 shows that the respondent in the treatment group and the control group obtained, children aged 3 years were 12 respondents (60%), children aged 4 years by 2 respondents (10%), and 5 year olds as many as 6 respondents (30%). Based on data from these studies it can be concluded that, most respondents was 3 years old.

As stages of growth and development, children at that age still have unstable health conditions, easy getting disease, the age of the child is also looked a sickness as punishment (Muscarì, 2005).

## b. Description of Respondent's Gender

**Table 2.** Distribution of Characteristics of Respondents based on Gender

Gender	Treatment	Control	N	(%)
Male	7	5	12	60%
Female	3	5	8	40%
Total	10	10	20	100%

Table 2 shows that in the treatment group and control group obtained 12 respondents (60%) male gender and 8 respondents (40%) were female. Based on these data, it can be concluded that the

respondents with male gender more often getting sick. Characteristic male generally prefer to play outside rather than inside the house so it is more susceptible of getting the disease.

## c. Description of Accompany Family

**Table 3.** Distribution of Characteristics of Respondent based on Accompany Family

Accompany Family	Treatment	Control	N	(%)
Parents	8	9	17	85%
Another family	2	1	3	15%
Total	10	10	20	100%

Table 3 shows that in the treatment group and the control group obtained 17 respondents (85%) accompanied by his parents (mom) when sick, and 3 respondents (15%) accompanied by other family members when sick. Based on the data obtained can be concluded that the presence of the parents (mothers) during the hospital has an important role in improving children's coping during adaptation to the hospital environment (Schiff, 2001).

## d. Description of Health Status

**Table 4.** Distribution of Characteristics of Respondents based on Health Status

Health Status	N	(%)
Febrile convulsions	8	40%
Fracture	2	10%
Gastroenteritis	2	10%
ARI	3	15%
Tonsillitis	2	10%

Health Status	N	(%)
Faringytis	1	5%
Dengue	1	5%
Asthma	1	5%
Total	20	100%

Table 4 shows that in the treatment group and the control group obtained 8 respondents (40%) with febrile convulsions medical diagnosis, 2 respondents (10%) with a medical diagnosis of fracture, 2 respondents (10%) with a medical diagnosis of gastroenteritis, 3 respondents (15%) with a medical diagnosis of ARI, 2 respondents (10%) with medical diagnoses tonsillitis, 1 respondent (5%) with a medical diagnosis of pharyngitis, 1 respondent (5%) with a medical diagnosis of dengue fever, and 1 respondent (5%) with other diagnoses medical asthma.

Based on these data, it can be concluded that, at most children treated with a medical diagnosis of febrile convulsions. At this age the immune system of preschool children begin to develop, but the high contact the child with new friend is also possible the child vulnerable to infectious diseases at preschool age (Ngastiah, 2005).

#### e. Data Description of Pretest and Posttest of Scores on Maladaptive Behavior in Treatment Group

**Table 5.** Data Distribution of Pretest dan Posttest in Treatment Group

Treatment	Mean	Minimum	Maximum	Std. Deviation
Pre test	58,10	40,00	75,00	1,16
Post test	26,70	13,00	35,00	6,49

Table 5 shows the results that the average score on the pretest measure maladaptive behavioral intervention children who were playing with the coloring was 58,10 with a standard deviation (SD) 1,16, the lowest value is 40 and the highest score is 75. While the value of the posttest measure maladaptive child behavior given intervention play with coloring obtained an average 26.70 with a standard deviation (SD) 6,49, the lowest value is 13 and the highest score was 35.

#### f. Data Description of Pre test and Post test of Scores on Maladaptive Behavior in Control Group

**Table 6.** Data Distribution of Pretest dan Posttest in Control Group

Control	Mean	Min	Max	Std. Dev.
Pretest	56,30	40,00	79,00	1,18
Posttest	55,20	40,00	77,00	1,20

Table 6 shows that in the control group gained an average pretest scores on measures of maladaptive behavior without intervention children playing with coloring is 56,30 with a standard deviation (SD) 1,18, the lowest value is 40 and the highest score is 79. While the value of the measurement posttest scores maladaptive behavior without intervention children play with the coloring obtained an average of 55,20 with a standard deviation (SD) 1,20, the lowest value is 40 and the highest score was 77.

#### g. Results of Normality Test

The test results from the test of normality Shapiro-Wilk with level of 95% was obtained



score  $P > 0,05$ . It can be concluded that the distribution of the data before and after treatment is normal, so for the next statistical tests can use T-test.

#### h. Result of Homogeneity Test

Results of homogeneity test of homogeneity of variance with confidence level of 95%, the result score of  $P > 0,05$  ( $0,889 > 0,05$ ) for variable control group and the treatment group. It can be concluded that the distribution in both of the data are homogeneous.

#### Data Analysis

Processing of the data in this study using Paired t-test and Independent t-test with SPSS (Statistical Product and Service Solution) 16 for Windows. Based on test Paired t-test showed that the significant value (P) Asymp. Sig. (2-tailed) in the treatment group was 0,000. This shows that  $H_0$  is rejected so playing with coloring can decrease behavior score maladaptive preschool child (3-5 years) who experienced hospitalization significantly.

In relations with this, the results of statistical tests Independent t-test is known that the value of significance (P) Asymp. Sig (2-tailed) is 0,022, score  $P < \alpha$  ( $0,000 < 0,05$ ), indicating that  $H_0$  refused and  $H_1$  accepted. This shows that play with the coloring can reduce maladaptive behavior score preschool children (3-5 years) who experienced hospitalization.

#### DISCUSSION

##### a. Maladaptive Behavior Scores Before and After Child is Given Intervention in the Treatment Group

The results of two studies conducted in Hospital of Kediri District, which is in the Amelia Pare Hospital and HVA Toeloengredjo Pare in the treatment group showed a difference in pretest and posttest values, after is given intervention play with coloring,

this is evidenced by the results of statistical tests Paired t test showed significance  $0.000 < \alpha$  with a confidence level of 95%.

The results obtained in this study is fitted with the theory Deslidel et al (2011) which states that by doing the game while in a children's hospital will be decrease the tension and stress they experienced, because by doing these activities children can divert the pain and bring relaxation through pleasure when playing the game. In addition, the statement of Suparto (2003) in Sujatmiko (2013) also supports the results of this study, stated that play with coloring can also provide opportunities for children to free expression and can function as a healer game, so it automatically negative child behavior can also be reduced. With coloring activity can provide a sense of pleasure in children although still undergoing treatment at the hospital, because basically preschool children (3-5 years old) is a very active child and imaginative.

##### b. Maladaptive Behavior Scores Before and After Child is Given Intervention in the Control Group

The results of two studies conducted in Hospital of Kediri District, which is in the Amelia Pare Pare Hospital and Toeloengredjo HVA Hospital in the control group showed

that there were only two respondents who experienced the difference in pretest and posttest, while other respondents did not show any difference in pretest and posttest. This is evidenced by the results of statistical tests Paired t test showed significance  $0,120 > \alpha$  with a confidence level of 95%, which means the provision of a standard intervention without additional intervention hospital play with coloring is no differences in pretest and posttest values significantly in preschool-aged children who experience of hospitalization.

The results of the study are consistent with the findings presented by Rudolph (2002) in Sukoati (2012) which said that, in the early stages of a child entering the hospital environment still need to adapt to the disease, as well as new and unfamiliar environment to undergo routine activities with hospital staff and the people around him. Children will also experience fear and pain because of disease or treatment measures undertaken during treatment. That's what causes children have maladaptive behaviors that tend to be high at the beginning of children admitted to hospital than after a given intervention from the hospital.

No difference in pretest and posttest scores in the control group, based on a statement proposed by Wong (2009) stated that the additional stimulation which can make the child distracted from the pain, and the child does not feel pleasure while in the hospital can make a child feel the same thing while in the hospital, so the child maladaptive behaviors tend to score the same or slightly decreased. With the provision of play activities for children in the

hospital will provide therapeutic value and important in the release of tension, so it can handle his maladaptive behavior of children during hospitalization.

### **c. Analysis of the Effects of Play with Coloring with Decreasing Maladaptive Behavior Scores in Treatment Group and Control Group**

The results of two studies conducted in Hospital of Kediri District is in Amelia Pare Pare Hospital and Toeloengredjo HVA Hospital, shows differences in pretest and posttest values significantly in the treatment group, compared with pretest and posttest values in the control group. This is evidenced by the results of statistical tests Independent t tests comparing the difference in pretest-posttest results in the control group and the treatment group showed significance  $0.000 < \alpha$ , which means there are significant differences between maladaptive behavior of children in both groups after a given intervention.

The difference in the scores of pretest and posttest control group and the treatment group, according to the theory put forward by Adriana (2011) which stated that, play with coloring can assist the child care without causing fear or trauma to the child, and in accordance with the stages of child development preschool age and do not require strenuous physical activity. Through a child coloring activity under conditions of stress and anxiety can be relaxed so that the child's negative behavior can also be controlled.

The process of implementation of interventions play with coloring can make

children trying to concentrate and focus to color pictorial paper, although many other activities going on around them. This shows that through the intervention children playing coloring then attention will be distracted, so that tension of child will be reduced. On the condition of the body relaxes, the body will release the hormone endorphin which are soothing, giving effect to emotional stimuli in the limbic system, resulting in the hypothalamic control of maladaptive behaviors that can lead to feelings of pleasure and well-being (Rudiansyah 2008, in Purwandari, 2009).

Based on the explaining and supported theories that appropriate interventions can be said that play with coloring can reduce maladaptive behavior score preschool children (3-5 years) who experienced a hospitalization in Hospital of Kediri District.

### **Limitations of Research**

Limitations faced by researchers when conducting intervention process is played by coloring the child has limited mobility because of illness they experienced, so it can not carry out the coloring process fully. Moreover, the unavailability of a convenient place in the children's hospital requires using makeshift base for the implementation of interventions to play with coloring. It can be a barrier to maximize the implementation of children's coloring process.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

Based on the results of research and discussion can be concluded that, before intervention given to play with coloring all respondents

in the treatment group and the control group showed higher scores for maladaptive behavior suffered hospitalization. After giving a playing with coloring intervention in the treatment group, the total respondents obtained decreasing a score of behavior maladaptif. While in the control group were given a standard intervention from the hospital only 3 respondents obtained scores decreased maladaptive behavior.

## **Recommendations**

### **For Nursing**

To develop the potential of pediatric nurse practitioners in nursing, as well as enhancing the knowledge and skills of nurses in approaching and interacting with children so that children are not afraid and feel pressure when visited by a nurse.

### **For Institutions**

To help lower scores on the maladaptive behavior of preschool children required facilities and pleasant environment so as to make the child feel safe and comfortable. This can be done for example by providing facilities coloring game tools, colorful rooms, as well as the spatial arrangement children can distract children against illness.

### **For Parents**

In this game, parents can play a role in providing support and motivation for children to be able to adapt optimally while undergoing treatment at the hospital.

### **For Further Research**

Further research needs to be done about playing with the coloring of the indicator

more specific maladaptive behaviors such as sleep disturbance, deterioration of growth and development, increased dependency, etc.

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## TRADITIONAL BULLYING VS CYBER BULLYING

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### ABSTRACT

**Introduction:** Cyberbullying is a new form of bullying. It become a trend since the technology grows more and more. This is very different with traditional bullying because it can be done in anywhere and anytime specially in private area. This literature review try to summarize some researches with cyberbullying and traditional bullying. **Method:** The method is collect and analyze the article of cyberbullying and traditional bullying. Articles collected through electronic databases Springer, ProQuest, ScienceDirect and using the keyword cyberbullying, traditional bullying, nursing. Criteria of the articles is full text and published in the period 2007–2013. **Result:** Most studies has explained very well the difference between cyberbullying and traditional bullying. Descriptive quantitative approach became the choice of most researchers who are considered able to explain the phenomenon well. But this is too narrow and restrict researchers. Secondly, they are more explaining bullying in education when anyone can be a victim of bullying, especially cyberbullying. Indispensable strong field research data with a qualitative approach to yield a better understanding. **Discuss:** In sum, although there are a number of studies investigating the use of quantitative approach, there is a lack of evidence concerning the question on what are successful coping strategies. Based on the current lack of sound empirical data, the report suggests future research strategies.

**Keywords:** *traditional bullying, cyberbullying*

## INTRODUCTION

The term cyberbullying gain its momentum nowadays. The age of globalization, defined as the age of electronic, bring a huge advancement of the using of social media. This age of electronic especially the using of social media, can be used in a positive way, but recently some negative impact also appears. Some of academia discuss the high potential using of social media as a mean of bullying. They found also that the advancement of technology can be used to make a threat against other children or peers. Cyberbullying becomes a serious problems inflicting psychological, social harm to many victims (Patchin & Hinduja, 2010).

In response to the new growth of a new type of bullying using a cyberspace, some researchers try to understand and elaborate more on this occurrence. Mostly, the term of cyberbullying can be discussed with interdisciplinary approach, ranging from mental health study, psychology, education and communication.

This article tried to impose more on some research that have been done by several scholar that put emphasis more on the nexus between traditional bullying and a new form of bullying-cyber bullying. This tried to compile numerous published research on this specific issue. Even though this article can't cover all of the published studies, but hope this review can give a better understanding and some insight of the study on cyberbullying.

## METHODS

The method is collect and analyze the article of cyberbullying and traditional bullying. Articles collected through electronic databases Springer, Proquest, ScienceDirect and using the keyword cyberbullying, traditional bullying, nursing. Criteria of the articles is full text and published in the period 2007–2013.

## RESULT

The research on this topics are vary, but mostly of those studies were portraying bullying and cyberbullying in educational life. They used children and adolescents as their respondent and research object. Gradinger, P. & Strohmeir, et al (2009) for example, on their research they explore seven hundred sixty one adolescent respondent's perception and testimony on the bullying and cyber bullying. Most of their respondent are aged 14–19 years with 15.6 years old median. According their study they tried to find out the importance of gender variable towards their adjustment ability on bullying and cyber bullying. They found that, the highest risk for poor adjustment on bullying and cyber bullying was founded on combined bully-victims respondent.

Study made by Gradinger, P. & Strohmeir, et al (2009) was conducted under survey method. This study focus on student social and emotional adjustment. Furthermore they surveyed grade 9 students in 10 different school located in Vienna-Austria. On conducting their study, Gradinger, P & Strohmeir, et al (2009) used a quantitative

method and interview done by trained research assistant. It means this research are strongly positivistic using outsider perspective to explain student's perception toward bullying and cyber bullying. In accordance with Gradinger, P. & Strohmeir, et al (2009), another research on educational life of children and adolescent point out that students or children with bullied experience were also likely to bully their peers especially in cyberspace (Beran, Tanya & Qing Li 2007). By surveying 432 students from grade 7-9 in Canada on their experience of bullying, they try to fill another study on bullying in educational life. In contrary, this study conclude that the gender variable are likely less significant for explaining bullying and cyberbullying. Identically with Gradinger, P. & Strohmeir, et al (2009), this study are more on quantitative method.

In more recent study, Su-Jin Yang & Robert Stewart, et al (2013) highlighting variance of gender variable towards victimization and bullying responses. This research was conducted by surveying 1.344 children aged 10 including bullying behavior/experience, depression, anxiety, coping strategies, self-esteem, and psychopathology. The survey itself was taking place in South Korea from 2004 to 2006. From those two types of difference research, can be summarize that some researcher undermine the role of gender variable, despite a different study found that gender variable matters.

Another study conducted by Sticca, Fabio & Sonja Perren (2012) illuminate the degree of severity between bullying and cyberbullying. On their study they developed a ranking tool that can be used to assess the

perceived severity of bullying scenarios in a quite simple way. According to their research they found that cyberbullying can bring more severity than traditional bullying in the term of the role of the medium and the role of publicity. Unfortunately this study only cover few types of bullying. In this study they used: exclusion, humiliation and threatening as the variable of bullying. Other forms of bullying especially in the context of cyberspace were not used. Moreover same with Beran, Tanya & Qing Li (2007) study, Meyer-Adams, Nancy, & Conner, Bradley T. (2008) Sticca, Fabio & Sonja Perren (2012) were not taking into account some personal and individual variable such as: gender, age, and personal involvement in bullying. Lastly, this study only reveal perceived severity, not the real severity. Also, this study identical with the previous studies above. This study is more on quantitative approach. Interesting study, conducted by Kowalski, Robin M. & Susan P. Limber (2012). Their study try to examine the relationships between children-adolescent experiences with cyberbullying and traditional bullying with their psychological, physical health and academic performance. Same with another studies before, this study, uses a statistical method to analyze survey on nine hundred thirty one students in grade 6-12. In conclusion, their study point out that there is a strong symbiosis between traditional bullying and cyber bullying. Cyber bullying couldn't be seen separately with traditional bullying especially in educational life of students. This research highlights the importance of focusing on both cyberbullying and traditional bullying, and preferably to focus on cyberbullying within broader bullying prevention efforts (Carter, 2013).



Study made by Blakeney (2012) put difference view. Same like previous study above, this research focus on bullying and cyberbullying in educational life. Uniquely, he tried to infer an instrument to measure traditional and cyberbullying and victimization behaviors in American overseas middle school students. The result of his study found that many of the behaviors associated with bullying inside a country were similar although some differences appears.

## DISCUSSION

Those academic research above, shows how cyberbullying can be seen as a defining problems under the educational life. In summary, most of the study that has been reviewed above, can gives better explanation and maybe some descriptive generalization, since this is one of the major advantage of a quantitative study. But the problems are all of those study couldn't: first, bring a better understanding of the phenomenon of bullying in general and cyberbullying specifically; second, those study focus more on children-educational life. These two disadvantages will be addressed bellow.

First, by focusing on quantitative paradigm, it means, the researcher try to be the outsider and explaining cyberbullying phenomenon. This positivistic approach, yes it has some benefits such as: the product of the research assumed as free-valued, secondly it can give a theoretical alike of bullying and cyberbullying phenomenon. But the problem is, this kind of research mostly will bring only theoretical or hypothesis testing. The research are too narrow and limit the open possibilities (Creswell. John W. 2003:20). On

the other words, those research didn't bring a new result that able to solve theoretical gap or puzzle. In the context of cyberbullying, it would be difficult to view cyberbullying just another traditional bullying'. The phenomenon of cyberbullying is a new kind phenomenon with the differences medium and types with another traditional bullying (Olweus, 1997).

Second, all of those inquiries were focused on student-adolescent educational life studies. As being pointed out before, the phenomenon of cyberbullying bring a new atmosphere of bullying issue. Based on study of Ybarra & Mitchell (2004) Advancement of information technology especially social media put not only children who have the possibility of bullying victims, but all of society could experience the same problems. The user of social media such as Twitter, Facebook, ask.fm, Line, or Path could bring also another social harassment same like bullying. In a nutshell it is very important to study the cyberbullying phenomenon in an adult life.

Differ with those studies above (Gradinger, P. & Strohmeir, et al 2009; Beran, Tanya & Qing Li 2007; Sticca, Fabio & Sonja Perren 2012; Kowalski, Robin M. & Susan P. Limber 2012), another point of view of research has been conducted by Richard Donegan in his research with the title "Bullying and Cyberbullying: History, Statistics, Law, Prevention and Analysis". Oppose with previous studies above, this study put more qualitative approach on bullying and cyber bullying. In his article Donegan (2012) using communication studies to discuss the occurrence of cyberbullying. As a student of

communication, Donegan (2012) not only bring a statistical-quantitative instrument for his study, he also emphasize on historical, law and policy point of view regarding cyberbullying. Unfortunately, this study lack of indigenous research to support his main argument, stated that the degree of prevention programs success depend on the understanding of bullying reason. Most of his argument on the motive behind bullying and cyberbullying based on second hand data or previous research (Donegan 2012). It is highly required a strong field research data for a qualitative approach to produce a better understanding result.

## CONCLUSION

In summary, the small literature review in this article, bring some conclusion that the phenomenon of cyberbullying bring a magnitude for some scholars to inquire it. In one side most of its scholars use positivist approach to explain and bring generalization on cyberbullying. This approach enhanced our view on the new type of bullying using cyberspace. On the other side, this issue is lack of scholar that put emphasize more on qualitative approach. It is necessary in the future to design a research with more understanding approach in this specific issue. The combination both of qualitative and quantitative can be seen as an opportunity for the further research. Last, most of the research on this theme, focused on children adolescent educational life study. In the future, it is possible to elaborate adult, working life for example for picturing the phenomenon of cyberbullying.

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# EFFECTS OF LISTENING AL-QUR'AN THERAPY; SURAH AL-FATIHAH FOR PAIN IN POST ORTHOPEDIC SURGERY FOR NON-PATHOLOGIC FRACTURE

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## ABSTRACT

**Introduction:** Surgery is an actual or potential threat of people's integrity, both biopsychosocial and spiritual which can cause pain response. Non-pharmacological techniques are often used to reduce postoperative pain is a distraction. One of distraction technique to reduce pain after orthopedic surgery for non-pathologic fracture is listening to Al-Qur'an surah Al-Fatihah. The aimed of this study was to investigate effects of listening Al-Qur'an therapy; surah Al-Fatihah for pain in post-orthopedic surgery for non-pathologic fracture in Surgery ward. **Method:** This study used pre-experimental with one group pre-post test design. Thirty nine (39) patients were selected through purposive sampling. The inclusion criteria were as: patients with post orthopedic surgery for non-pathologic fracture, used general anesthetic or spinal anesthetic, muslim, and used PSSW (Pedicel Semilactomi Srow and Wire) or ORIF (Open Reduction and Internal Fixation) operative method. Listening to Al-Qur'an (surah Al-Fatihah) were done for 5 times for one time intervention through Mp3 Player and headphone. Data were collected by using Numeric Rating Scale (NRS) and were analyzed by using Wilcoxon Sign Rank Test with significance level  $\alpha = 0.05$ . **Result:** Results showed that there was a significant effect of listening Al-Qur'an therapy; surah Al-Fatihah on pain in post orthopedic surgery for non-pathologic fracture ( $p = 0.001$ ). **Discussion:** Listening Al-qur'an therapy: Surah Al-Fatihah can reduce pain in patients post orthopedic surgery for non-pathologic fracture.

**Keywords:** *pain, post orthopedic surgery, non-pathologic fracture, Al-Qur'an Therapy, Surah Al-Fatihah*

# EFFECT OF MENTAL HEALTH EDUCATION ON STUDENTS' KNOWLEDGE, ATTITUDE AND ACTION IN VIOLENCE EARLY DETECTION IN CHILDREN

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## ABSTRACT

**Introduction:** Child abuse may occur in various places and the case is not easy to disclose. Children as victims of violence often have closed or dodging attitude. The effect that occurs in children as a result of violence can be in the form of prolonged physical or mental disorders. The purpose of this study was to disclose the effect of mental health education on students' knowledge, attitudes and actions on early detection of child abuse. **Methods:** This study was a pre-experimental study. The population was grade 5 and 6 students at SDN Manyar Sabrangan II Surabaya with a sample of 62 respondents, determined by total sampling. Data were collected using questionnaire that had been tested for validity and reliability. The analysis was performed using Wilcoxon signed rank test with significance level of  $p < 0.05$ . **Results:** Health education had effect on students' knowledge ( $p = 0.014$ ), attitude ( $p = 0.009$ ) and action ( $p = 0.03$ ). **Discussion:** Reliable health behavior may prevent children from violence. Knowledge, attitudes and actions can help students to have the ability to express their feelings in relations with violence they experienced. It is suggested for further research use the action by using emoticons sticker as early detection of child abuse, which can then be developed by the School Health Unit (Unit Kesehatan Sekolah, UKS) to maintain students's physical and mental health.

**Keywords:** *health education, child abuse, early detection, emoticons sticker*

# THE EFFECT OF MAKE A MATCH LEARNING TOWARDS FREE SEX PREVENTION OF JUNIOR HIGH SCHOOL 7<sup>th</sup> GRADE STUDENT AT SMP NEGERI 2 KEBOMAS GRESIK

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## ABSTRACT

**Introduction:** Free sex among adolescents is increasing. In adolescence occur physical changes that influence the development of sex life. Great curiosity can lead to the occurrence of sexual deviance. It will be worst if not given the proper information to avoid free sex. The purpose of this study was to explain the effect of make a match learning method in the prevention of free sex in junior high school students. **Method:** This study used quasi experimental with two group pre-post test design. The population were 7<sup>th</sup> grader in SMP Negeri 2 Kebomas Gresik and the sample were 66 students for two classes. The sample were taken by simple random sampling. Make a match learning method as independent variable and prevention of free sex as dependent variable. Data were collected used questionnaire, and analyzed used *Wilcoxon Signed Rank Test* and *Mann Whitney* with significant level  $\leq 0.05$ . **Results:** The result were knowledge ( $p = 0.000$ ) and attitude ( $p = 0.000$ ) for intervention group. It means that there was a significant change in the level of knowledge and attitude of students. While in control group, knowledge ( $p = 0.004$ ) and attitude ( $p = 1.000$ ). It means that there was a change of knowledge but no change in the attitude of students. **Discussion:** The result showed that make a match learning method is effective to increase knowledge and attitude to prevent free sex. This research recommended to be applied to adolescents to improve their knowledge and attitude about prevention of free sex.

**Keywords:** *prevention, free sex, adolescent, make a match, knowledge, attitude*

# DIFFERENCES IN THE EFFECT OF KERONCONG MUSIC THERAPY AND PROGRESSIVE MUSCLE RELAXATION ON DECREASING INSOMNIA IN THE ELDERLY IN PANTI PANGESTI LAWANG

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## **ABSTRACT**

**Introduction:** Nowadays the number of elderly has increased and followed by a variety of problems including insomnia. The purpose of this study was to determine the differences in the effect of keroncong music therapy and progressive muscle relaxation on decreasing insomnia in the elderly in Panti Pangesti Lawang. **Method:** This study used quasi experimental research design with Nonequivalent Control Group Design. Total respondents are 33 for keroncong music therapy group, progressive muscle and control group. Collecting data used a questionnaire of The Insomnia Severity Index. Once given within 7 days of treatment, the elderly insomnia remeasured. The data were analyzed with Wilcoxon Signed Ranks and Mann Whitney test. **Results:** There were differences in elderly insomnia before and after keroncong music therapy ( $p = 0.015$ ) and progressive muscle relaxation ( $p = 0.001$ ) were given, while the control group there was no difference ( $p = 0.072$ ); and there was no difference in the effect keroncong music therapy and progressive muscle relaxation on decreasing insomnia in the elderly ( $p=0.180$ ). **Discussion:** Both keroncong music therapy and progressive muscle relaxation give the same benefit on decreasing insomnia in the elderly. Nurses can give keroncong music therapy or progressive muscle relaxation to decrease insomnia in the elderly depends on their needs or their preferences.

**Keywords:** *elderly, insomnia, keroncong music therapy, progressive muscle relaxation*

## CASE STUDY: FAMILY PERFORMANCE AS A DRUG-TAKING ASSISTANCE

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### **ABSTRACT**

**Introduction:** Tuberculosis (TBC) is a global health problem and challenge. In Indonesia, TBC has affected 107 people within 100,000 populations with the prevalence rate of 0.7 percent. This data has placed Indonesia among the highest recorded TBC cases in the world. The implementation of DOTS strategies utilizing Drug-Taking Assistance or Pengawas Menelan Obat (PMO) is to ensure that the patients take up the prescribed medication on regular basis. Research suggests that employing family members or immediate relatives as PMO workers has increased the drug-intake the success rate. However, the result might vary across regions.

**Methods:** This study specifically aims to evaluate the role of family members of PMO at the Puskesmas in the Cimahi south district, using qualitative approach. The total sampling uses to cover 30 respondents. Data collection employs windshield survey, structured interview, and FGD (Focus Group Discussion). **Result:** Data analysis using Mann-Whitney reveals that the role of family as PMO in the district under study was found to be less effective. **Discussion:** The primary cause is due to lack of education, especially their knowledge around TBC and the sense of responsibility of the role. These are all attributed to the minimum support from the Puskesmas staff in providing continuous training and mentoring.

**Keywords:** *tuberculosis, Drug-Taking Assistance or Pengawas Menelan Obat (PMO), family*



## INTRODUCTION

Tuberculosis (TB) is a chronic infectious disease is still a public health problem in the world, including Indonesia (global epidemic). Report of the World Health Organization (WHO) in the Annual Report on Global Tuberculosis Control 2003 states there are 22 countries that are categorized as high-burden countries for tuberculosis which Indonesia ranks third contributor TB cases after India and China. Estimates of the incidence of infectious tuberculosis (BTA+) in Indonesia is 107 per 100,000 population, while the prevalence of TB was 110 per 100,000 population (National Prevalence Survey, 2004). Results of Basic Health Research (Riskesdas) in 2010 showed that the prevalence of tuberculosis nationally 0.7 percent; in this case there was an increase compared with the prevalence figures Riskesdas 2007 of 0.4%.

Until now, tuberculosis (TB) is still a public health problem that is becoming a global challenge. Indonesia is the first country among the countries with the burden of high TV in the region to reach the Millennium Development Goals (MDGs) for TB in 2006, ie 70% discovery of new cases of BTA positive and 85% recovery (MOH, 2011). These results put Indonesia as number five of five countries with the highest TB burden in the world, down from the previous third. Nevertheless TB remains a serious threat to the entire population of Indonesia. According Triretno (2011), the high incidence of TB in people with HIV and the increasing incidence of Multi Drug Resistance (MDR) causes more difficult to control tuberculosis.

TB control needs to get more attention from the government because of the impact

that is very detrimental. When linked with the influence of the economic situation, TBC will affect the domestic economy, society and nation, because most (75%) of tuberculosis attacking the productive age (14-59 years). A TB patient will experience direct economic losses for treatment and indirect costs for transport as well as loss of working time of 3–4 months which is comparable to 20–30% of household a year income. If a person died of tuberculosis, the impairment loss is proportional to the family average income for 15 years (WHO, 2003). Gani, A. (2004), estimates the national economic losses caused by tuberculosis, almost equal to the total health budget of the Indonesian government.

TB prevention programs with the strategy of Directly Observed Treatment Shortcourse (DOTS) in Indonesia have been carried out since 1995, and until now has been a lot of progress (Philip, 2002). The progress can be seen from the tendency to increase the achievement of program indicators, namely Case Detection Rate (CDR), Cure Rate (CR) and Conversion Rate. DOTS strategy in Indonesia applied by using the Drug Taking Assistance. With this strategy, a national incidence of TB already be suppressed; although in some areas of tuberculosis remains high.

Drug Taking Assistances or Pengawas Menelan Obat (PMO) is someone who helps TB patients to undergo treatment with reminding and watching to swallow the drug and give encouragement so that TB patients do not despair (PPTI, 2010). A TB patient should receive medication supervision in swallowing due to treat tuberculosis must take medication for a long time at least 6

months so many patients who feel bored. Usually TB patients after taking drugs for 2-3 weeks are already feeling healthy so they do not want to continue medication until finish. It is very dangerous because it cause patients resistant to anti-tuberculosis drugs.

At the beginning of the program the person appointed to be the PMO are medical workers or community leaders, but in the development so mane patient's family as PMO. Istiawan reserach, Sahar, and Bachtiar (2006) proves that the role of the PMO families with clients tuberculosis prevention behavior showed a strong relationship ( $r = 0.656$ ). The pattern of the relationship is patterned positive, meaning that the higher the role of the family PMO higher the client's behavior tuberculosis prevention for the prevention of transmission. The results are consistent with research conducted by Noviadi, Kusumawaty and Ikop (1999), that the family's role in supervise swallow the drugs will improve prevention behaviors of TBC clients to prevent transmission at home.

The use of family as PMO also improve patient compliance to swallow drugs considering family is the main source of support for patients. This is proved in the Hutapea research (2006), which shows the value  $f = 5.502$  and  $p = 0.001$  ( $p < 0.05$ ) and a correlation coefficient  $r = 0.210$ . The analysis results show higher support from family, the higher level of patients compliance taking anti-tuberculosis drugs.

Some result of studies have been used as the basis implementation of the policy use of family as PMO in some areas. PHC South Cimahi is one of area in Cimahi, West Java, which uses the family as PMO. The policy is

applied beside based on result of studies also with some consideration; among others, the limited number of doctors and nurses in health centers are not comparable with high cases of tuberculosis.

Characteristics of wor area Puskesmas South Cimahi is a sub-urban area and used as centers of development of industrial areas that attract many newcomer; make the village has a high density. Dense housing, less ventilation and light, and low public understanding of TB proved by the negative stigma about TB makes the spread of tuberculosis in the region is quite high, generally concentrated in a few locations so forming pockets of tuberculosis.

Until now Puskesmas South Cimahi have never done an evaluation about the effectiveness the use of the family as PMO. Although several researches shows that a high level of effectiveness, but the difference area with various characteristics can show different results. Based on these descriptions, this study was conducted to identify the implementation the role of the family as PMO as evaluation materials.

## METHODS

This study was a descriptive interpretative case study with a quantitative approach. Primary data collection techniques conducted by winshield survey and structured interviews. Validity and reliability test of the instrument interview obtained internal consistency (Cronbach alpha) of 0.82. Respondent Interview consist of family member as PMO and tuberculosis patients who are undergoing treatment with Anti-Tuberculosis Drugs (OAT) which amounted to

30 respondents and taken by total sampling. Observations carried out thoroughly on the environment and condition of the patient. Secondary data were obtained through the study of documentation and interviews with the person in charge of health centers and the management of PPTI and conducted focus group discussions involving the PMO, tuberculosis patients and health cares specialized PMO. The main data analysis conducted on two independent samples by using the Mann-Whitney test. The study was carried out in the working are of Puskesmas South Cimahi, Cimahi City, West Java Province. The review process takes place during the Community Nursing residency that began October 1 until December 19, 2012.

## RESULTS

The table 1 indicates that the number of PMO in Puskesmas South Cimahi working area based on sex showed a insignificant

difference. The results of interviews with the holder of the program conducted subjectively based on ability, spare time, and cooperative attitude to do PMO; without considering the difference of sex.

PMO education level in Puskesmas South Cimahi quite varied, most have low education levels. 30% PMO primary school education, 23.3% junior high school, 26.7% are even PMO did not finish primary school, and only 20% PMO has a good educational categories namely high school graduates. The low level of education is directly proportional to knowledge level PMO about tuberculosis and the task as PMO. This is proved by the table 1 above shows that there are 11 people (36.7%) PMO has less knowledge categories, and 6 (20%) PMO have very less knowledge category; while the PMO with a good knowledge category there are 9 people (30%) and only 4 people (13.3%) PMO which has a very good knowledge category.

Table 1. The characteristics of respondents by sex, level of education, and PMO knowledge about tuberculosis and PMO Duties in Puskesmas South Cimahi.

	Criteria	Frequency	Persentase	Amount
Sex	Male	14	46.7	30
	Female	16	53.3	
Education	No school	8	26.7	30
	Primary School	9	30.0	
	Junior High School	7	23.3	
	Senior High School	6	20.0	
Knowledge PMO About TB and Duties PMO	Very less	6	20.0	30
	Less	11	36.7	
	Good	9	30.0	
	Very Good	4	13.3	

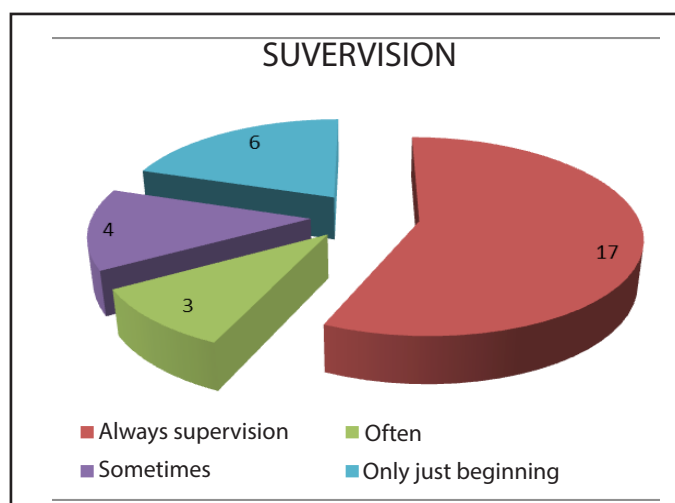


Figure 1: Implementation Supervision PMO In OAT Swallowing

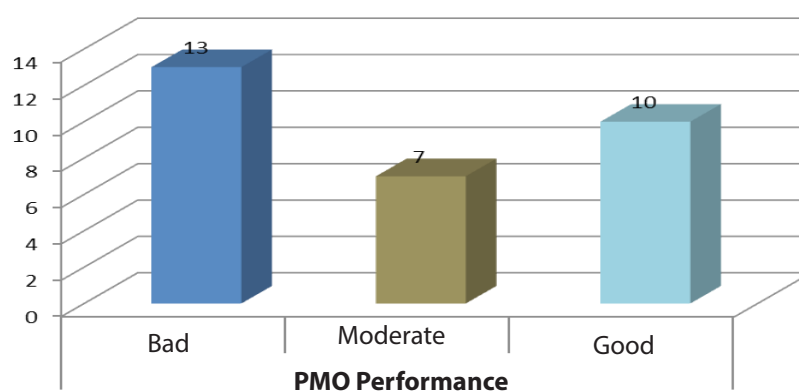


Figure 2: Performance PMO in Puskesmas South Cimahi.

Figure 1 shows that the implementation task as PMO in monitoring swallowing drugs to TB mostly (56.7%) went well. Yet still, it is a matter because regular supervision until the treatment completion should be done by entire PMO (100%). In Puskesmas South Cimahi there are three PMO (10%) who perform a monitoring role quite often but not routinely, four PMO (13.3%) supervise occasionally, and six PMO (20%) to supervise at the beginning of the treatment program only.

The principle of anti-tuberculosis treatment requires regular treatment until completely finished. In fact, there is a

presumption that it is better not given the drug than taking medication but irregular or incomplete. This relates to the risks that may occur, which is to TB germs resistance to the drugs adding greater possibilities the failure of medication. PMO in the region of South Cimahi Puskesmas mostly have poor performance quality. PMO performance quality is measured from 4 (four) main tasks PMO. Based on table 2 knowing that 13 person (43.4%) PMO who have poor performance qualities, 7 people (23.3%) had moderate performance quality, and there are only 10 person (33.3%) PMO that has good performance.

Successful treatment of tuberculosis patients was strongly influenced by patient compliance in the treatment program. Compliance tuberculosis patients swallow anti-tuberculosis drugs is based on the regularity of swallowing drugs on schedule based on the type and dose of medication. Patients with tuberculosis in working area of

Puskesmas South Cimahi largely disobedient to the treatment program. Table 3 shows that there are 22 people (73.3%) patients inobidient took the drug, and there are only 8 people (26.7%) patients who compliance swallowed the drug. Inobidient patient swallowing the drug is directly proportional to the role of supervision by the PMO.

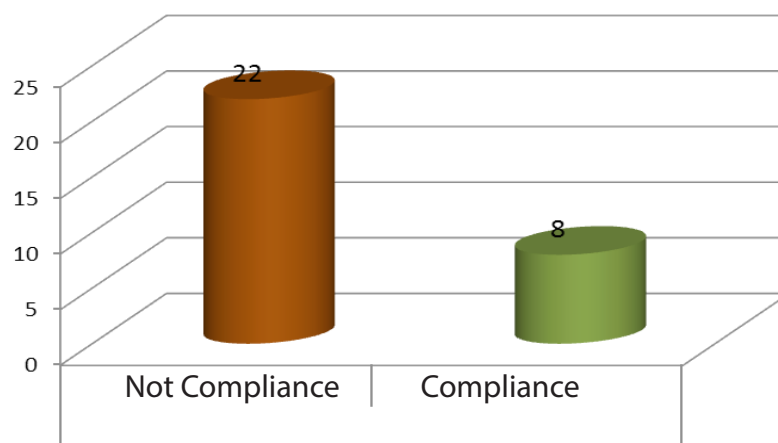


Figure 3: Tuberculosis Patient Compliance Swallowing Anti Tuberculosis in Puskesmas South Cimahi.

Table 2: Test Different 2 independent samples.

	Gender	Education	Knowledge	Supervision	Performance
Mann-Whitney U	39.000	19.500	26.500	49.500	35.000
Wilcoxon W	75.000	272.500	279.500	302.500	288.000
Z	-2.658	-3.323	-3.016	-2.009	-2.665
Asymp. Sig. (2-tailed)	.073	.001	.003	.045	.008
Exact Sig. [2*(1-tailed Sig.)]	.021b	.001b	.003b	.070b	.012b

Different test independent samples using Mann-Whitney to determine the relationship between gender and compliance patient swallowing drugs. Category of education level, PMO knowledge about tuberculosis and the tasks, monitoring implementation

of swallowing the drug, and quality of PMO. Based on table above, obtained  $p = 0.073 > \alpha$  (0.05) gender category. This gives conclusion that there is no significant relationship between gender with patient compliance to swallow medicine. Category level of

education, knowledge about tuberculosis and PMO tasks, monitoring the implementation of swallowing drug, and the quality of PMO performance, each obtained  $p < \alpha$  (0.05). It can be concluded that there is a significant relationship between the level of education, PMO knowledge about tuberculosis and the PMO tasks, monitoring the implementation of swallowing the drug, and PMO performance quality to patient compliance to swallow drugs.

## DISCUSSION

There is no significant difference in respondents' level of understanding about duties and obligations as the PMO between women and men ( $p = 0.641$ ). Thus gender should not be considered in the selection of a PMO. Consideration of PMO election can be based on education level, counseling history of attending counseling about TBC, motivation, sense of responsibility, and availability of time. Election of family members as PMO also should be done by considering the individual characteristics. This is compatible the opinion of Skinner (1983) in Notoatmodjo (2003) that the individual characteristics that are internal factors influence someone health behavior. Positive health behavior can be realized in the implementation of duties and obligations, including as PMO; regardless of gender.

Health behavior change in connection with role implementation as PMO effected by internal and external individuals. According Sarwono (2007), the individual internal factors include the perception, motivation and emotion; individuals external factors consist

of social aspects of culture, communication and interaction between individuals, human resources can be utilized, and encouragement of the social environment. Most of the PMO in Puskesmas South Cimahi have a background in elementary education and school or did not complete primary school background with the level of knowledge about tuberculosis and the PMO duties are generally less. Analysis of relationship between the two resulted in a significance level of  $p = 0.000$ , which means that the higher the education, the better the level of knowledge; contrary the lower the level of education the less knowledge. Thus, it is understandable if the failure rate of TB treatment in the region are still quite high. It is proved by the conversion rate of BTA positive in 2011 only reached 60.86% and the cure rate in the same year only 68.33%. Based on the description it seems clear that there is a less precise in the selection PMO in PMO South Cimahi region.

Purnomo's study (2009) found that patients get less health information from PMO officials related to lower levels of education and knowledge possessed. Relation between patient and PMO also affect the success of treatment. The study found a significant relationship between the frequency of giving information about TBC with knowledge and compliance clients treatment. In this case the PMO is less able to provide health information to the patient as himself have limited knowledge.

Most of the PMO in the Health Center South Cimahi had attended counseling about TB. This is understandable considering every discovery of new cases will appoint PMO

and always accompanied by the provision of information about tuberculosis as well as the duties and obligations of a PMO. Also in the region there has also been a special cadre PMO scattered in every pillar of citizens who are quite active in the TB program. So it is surprising that it is still 13 PMO (43%) who claimed never have received information about tuberculosis. It may be caused by misperception to questions and respondents did not honest to answer the question.

Counseling about TBC specifically and directly to the public according to the majority of respondents had never done. However, the delivery of health information associated with TB has never been done in the neighborhood health center, where the activities are superimposed on health promotion programs (Promkes) and environmental health (environmental health), but these activities are not routinely performed. As well as the delivery of information by health professionals to patients who went to the clinic has also been given.

The amount numbers of non-compliance will lead to high treatment failure and cause more found of TB patients with BTA which resistance with standard treatment. Such circumstances would complicate the eradication of tuberculosis in Indonesia as well as aggravate the burden of the government. Referring to various factors that cause non-compliance tuberculosis patients take medication, it can be concluded that the human factor, in this case people with tuberculosis is the main factor for non-compliance taking medication.

A total of 13 people PMO (43%) in Puskesmas South Cimahi have poor performance quality. This situation is directly proportional to the low level of education PMO. The analysis showed that education positive contributes to the quality of the performance of PMO ( $p = 0.008$ ). In this case, poor performance of the PMO in the Puskesmas South Cimahi because of low level of education. Poor performance of PMO proved by PMO routine monitoring to the clients in swallowing drugs only 17 (56.7%) who routinely perform daily supervision. The rest are 3 people (10%) often enough to supervise but not regularly supervise; 4 people (13.3%) occasionally conduct supervision to swallowing drugs; and 6 people (20%) only conduct supervision at the beginning of the treatment program. Researchers suspect that the presence of the treatment failure rate in the region Puskesmas South Cimahi which are caused by not optimal the role of supervision to swallow drugs by PMO. The observation results prove that 5 (five) of the 30 patients with TB in the region is a recurrent cases. Through further study obtained information that the recurrent patient has an incomplete treatment treatment history (drop out).

Based on interviews obtained information that there are four main reasons respondents did not conduct supervision until finish, namely bored, believe the client will swallow the medication even without supervision, forget, and have no time. It also obtained information that after taking the drug for two or three weeks had client feel recovered so do not need to take medication

regularly. These reasons indicate how the knowledge of the client and the PMO about tuberculosis is still very low. The situation is more serious related to possibility of germs resistance against OAT.

The Analysis of relationship between the level of knowledge and the role of supervision has a positive relationship ( $p = 0.013$ ), which means that the higher the level of knowledge the better in performing supervision role in swallowing drugs and vice versa. The level of knowledge is directly proportional to levels of education. However in this study contained PMO with poor knowledge and education but able to perform supervision tasks properly. This is possible by exposure of the respondents with information about TB through counseling ever got. Besides motivation, responsibility and time availability also contribute. Heriyanto and Kromalig research (2004) identified bored as the biggest obstacle factor that facing a PMO (45.5%).

PMO Knowledge also affect client compliance to drink OAT regularly. Data study proves that the better the level of knowledge PMO, so the client regularly ingest the drug. The high level of client non-compliance to swallow drugs, as many as 22 people (73.3%) of course closely related to the low level of PMO knowledge. It shows that efforts to control tuberculosis in the region are still not optimal.

PMO Performance measured by the implementation of the four basic tasks PMO which is to ensure the patient swallows the medication correctly and regularly, reminding patients to re-check sputum at a set time, give counseling about and suggest

family member of patient to consult if there is a suspected tuberculosis, and supervise side effects of drugs. In general, the performance of PMO in the region of South Cimahi PHC was low proved by 13 people PMO (43%) had a poor performance and only 10 people (33%) had a good performance. Generally, all PMO are only perform the main tasks, namely to supervise and ensure the client swallow medication; even then still not optimal because only 17 people PMO (56.7%), which ensures the client took the drug until finish. While the other three main tasks mostly ignored. The situation is in line with the results of previous interviews that mentions four reasons, namely bored, believe the client will swallow the medication even without supervision, forgetting, and no time. Analysis of gender relations and the PMO performance showed that there was no significant difference ( $p = 0.441$ ). PMO performance quality is influenced by the level of education, history attend counseling of tuberculosis, motivation, responsibility, and availability of time. In this case the policy of health centers and local government political commitment needs to be updated.

Negative stigma about the tuberculosis indicates that people's knowledge is still low. The stigma of tuberculosis in Puskesmas South Cimahi known through information obtained from the society. It is proved by the results of the survey were asked about how the perceptions of respondents about TB before becoming PMO. The survey results are get 11 people (37%) said that tuberculosis is a hereditary disease, 1 person (3%) said that tuberculosis is a shameful disease, 4 people (13%) said that tuberculosis is a curse disease.



Stigma is also implied from shyness the TB patient that expressed by 10 people (33%). Bad effects of stigma about TB is the social isolation of the community to patients and patients themselves who withdrew from public life. Even there the information obtained from the cadre that there was a patient in the region who are migrants from outside the region due to expelled by the local residents. There is still a stigma to prove that TB control efforts are still not successful. Counseling and socialization conducted by health officials apparently have not given the expected results. It may be that these efforts are not done properly, targets, methods, media, and approach. Furthermore, the stigma contributes to the poor performance of PMO that effect noncompliance client to swallow drugs. Most of the TB patients in the region Puskesmas South Cimahi taking medication irregularly, around 22 people (73.3%).

Treatment compliance is defined as an attitude and behavior that follow each suggestion and instructions of treatment is given with full awareness. Compliance implies indirect submissive and cooperation attitude of the patient for his own good. PMO is the person who supervise and reminding patients to take medication. The existence of a PMO suspected as a factor that affect treatment compliance. Purnomo study (2009) proved that the existence of the PMO

are factors that influence to the compliance of treatment tuberculosis patients

The increasing of stigma and existence tendency to treatment failure should consider as program challenge. Evaluation of preventive and promotive efforts must be carried out, especially the level of education and public awareness is still low despite health education has often given. It may be that the situation is the effect of inaccuracy of health management. Efforts to improve health programs synergy with other sectors is expected to be a wise solution.

### **CONCLUSION**

Family empowerment as PMO in Puskesmas South Cimahi is less effective. Most PMO have a poor performance (43%) with only conduct one of the four main tasks of PMO is not optimal. Factors that affect the poor performance of PMO include low levels of education, the lack of quantity and quality of education and socialization of tuberculosis, and the lack of PMO guidance by health center personnel. Poor performance of the PMO increase the rate of treatment failure and disease relapse. Thus, it is suggested that in the selection of the PMO should consider aspects of education, motivation, responsibility, and availability of time. Puskesmas officers are also expected to provide guidance/coaching to the PMO periodically, for example in the form of PMO monthly meetings.

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# FAMILY EMPOWERMENT MODEL TO PERFORM MAINTENANCE ON THE FAMILY WITH CANCER BY USING CALLAGARI NURSING MODEL

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## ABSTRACT

**Introduction:** Cancer is a disease caused by uncontrolled growth of tissue in the human body, refractory and fatal. Globally, cancer incidence rates around 5–20% and as the leading cause of death, including heart disease and stroke. Patients suffering from cancer in addition to suffer physically also suffer from social, psychological, and even spiritual. Therefore, prevention of cancer in an integrated and holistic should involve the entire community, because of the needs of cancer patients is very complex, the need to be free of pain, need to be considered, and the need for psychological support. To help cancer patients overall serious efforts are needed and the role of the family is very important. It is necessary to empower the family. The aim of this study was to determine the model of the empowerment of the family in care in families with cancer by using a nursing model Callgari. **Methods:** This research uses experimental research design quasy Pre-post test design. The research sample as many as 11 people, samples taken from a population of cancer patients with a family in Puskesmas Kalijudan Surabaya. Technique purposive sampling of respondents who met the inclusion criteria. Data captured demographic, assessment Calgary, knowledge, attitudes, practices in the treatment of cancer in the family. Data were analyzed using the Wilcoxon Sign Rank Test and Mann Whitney with significance level  $\leq 0.05$ . **Results:** The result showed that of statistical tests Wilcoxon Sign Rank Test showed an increase in knowledge, attitudes, practices keluarga in care with family members of cancer patients before dans esudah be approached intervention model family with the value of each knowledge  $p=0.001$ , attitude  $p = 0.001$ , the practice of  $p = 0.001$ , Calgary family interventions effectively improve the knowledge, attitudes, practices family to perform maintenance on the members of cancer patients. **Discussion:** The first level of health care nurses can facilitate the family to cooperate with the doctors who treat people with cancer to monitor the development of the health condition of people with cancer..

**Keywords:** *Calgary model, childhood asthma, asthma control*

# SUPPORT OF HUSBANDS AND OTHER FAMILY MEMBERS IN PROVIDING SUPPORT TO HIV-POSITIVE MOTHERS IN EAST JAVA

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## ABSTRACT

**Introduction:** Starting in 2012, the Ministry of Health of Indonesia to implement a mandatory program for all pregnant women in Indonesia to take HIV test. This program cannot be implemented 100% because there are many people who fear to take test for HIV. One of the main causes is still high stigma and discrimination against people infected with HIV. In conducting the tests are still many obstacles, especially if there is a woman with a known HIV-positive. There are many factors that must be dug out of any problem faced by mothers with HIV positive. Approach to reducing fear to take an HIV test is to involve husbands and family member. This approach was chosen because based Indonesian culture that the husband is the head of the family and the decision making is usually done by husband and other family members. The aim of this study was to determine the factors identifying obstacles and forms of support given by husband and family member in providing support to mothers with HIV positive. **Method:** This research is a descriptive study with an analysis of various factors constraints and support given by husband and family member in providing support to mothers with HIV positive. The population is 20 members of the family of a mother with HIV-positive. **Results:** 35% husbands refuse HIV testing of pregnant women, 70% of families do not dare to open if you have a family member/mothers who are HIV positive. **Discussion:** The conclusion is family support is important for people live with HIV/AIDS to Enhance Reviews their quality of life.

**Keywords:** *husband support, family support, mother with HIV positive*

## PHYSICAL EXERCISE AND SELF CARE IN ELDERLY AT ELDERLY POSYANDU FAJAR ASIH NGINDEN IV SURABAYA

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### ABSTRACT

**Introduction:** The decreasing in musculoskeletal function in elderly could decrease the strength, contraction, elasticity and flexibility of muscle. All that factors lowered ability in activity of daily living which was important in self care fulfillment. Physical exercise could increase self care ability in elderly by improved the musculoskeletal function. Elderly gymnastic is one of physical exercise that can be done by the elderly. The aim of this study was to analyze the effect of elderly gymnastic on self care in elderly. **Method:** The design used was pre experimental with the type of one group pre-post test design. The population in this study were all elderly at Posyandu FajarAsih Nginden IV Surabaya. Sampling technique used purposive sampling and the number of sample were 20 elderlies. Independent variable was elderly gymnastic done for 60 minutes 3 times weekly during 5 weeks. Dependent variable was self care observed with Barthel index used to measure the level of self care based on activity of daily living. Data was analyzed by Wilcoxon signed rank test with CI 95%. **Results:** The results showed that 50% respondent had mild dependency at self care before doing gymnastic. The elderly showed increasing level of self care which was 90% elderly at independent level after doing gymnastic. Wilcoxon test showed p value = 0.001. It mean that there was effect of exercise on self care in elderly after doing gymnastic for 5 weeks. **Discussion:** Elderly gymnastic was physical exercise appeared to improve musculoskeletal function so that increasing self care activities in elderly.

**Keywords:** *elderly, gymnastic, self care*

# THE CORRELATION BETWEEN FAMILY SUPPORT WITH SELF CARE MANAGEMENT OF THE ELDERLY WITH SLEEP DISORDERS

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## **ABSTRACT**

**Intriduction:** Elderly at risk of sleep disorders caused by the decline in physical and mental abilities. One of sleep disorder management is self care management. Family support can help the elderly carry out self care management of sleep disorders. Family support is given in the form of emotional, appreciation, instrumental, and information support. This study was aimed to analyze the relationship between family supportwith self-care management of the elderly with sleep disorders. **Methods:** Design used in this study was a correlational study. The population was 26 elderly with sleep disorder listed at Elderly PosyanduGembongan, Gedeg, Mojokerto. Respondents are 25 selected through a purposive sampling. The independent variable was family support that obtained through questionnaire. The dependent variable was self-care management of the elderly with sleep disorders that obtained through structured questionnaire form. Data were analyzed by Spearman's Rho with a significance level of  $\alpha < 0.05$ . **Results:**The results of the correlation test showed  $p = 0.018$  and  $r = 0.469$ . So, the results showed that there is a correlation between family support with self-care management of the elderly with sleep disorders. **Discuss:** It can be concluded that the correlation between the two variables is strong enough. Family support effect on self-care management of the elderly with sleep disorders. Therefore, more research is needed to involving the family in improving self-care management of the elderly with sleep disorders.

**Keywords:** *family support, self-care management, elderly with sleep disorders*

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