

EFFECT OF BIRTH TEMPERATURE AND MATERNAL COMORBIDITY ON BIRTH WEIGHT AT DISCHARGE AND LENGTH OF STAY AMONG NEONATES WITH LOW BIRTH WEIGHT AT THE HOSPITAL

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ABSTRACT

Background: World Health Organization (WHO) defined low birth weight (LBW) as an infant birth weight $\leq 2,499$ g, regardless of gestational age. Infant weight is accepted as a single parameter directly related to the health and nutrition of the mother and her newborn. Infant weight is an important determinant of the chance of the newborn to survive and experience healthy growth and development. This study aimed to examine the effect of birth temperature and maternal comorbidity on birth weight at discharge and length of stay among neonates with LBW at the hospital.

Subjects and Method: This was a cross-sectional study conducted at the perinatology room in Dr. Soebandi Hospital, Jember, East Java. A total of 107 neonates was selected for this study. The dependent variables were birth weight at discharge and length of stay. The independent variables were birth temperature and maternal comorbidity. The data were collected by questionnaire and analyzed by path analysis.

Results: Birth weight at discharge directly increased with good birth temperature ($b= 0.30$; 95% CI= 0.14 to 0.46; $p \leq 0.001$) and the absence of maternal comorbidity ($b= -0.32$; 95% CI= -0.47 to -0.16; $p \leq 0.001$). Length of stay increased with maternal comorbidity ($b= 0.21$; 95% CI= 0.02 to 0.39; $p= 0.027$) and low birth weight ($b= -0.20$; 95% CI= -0.38 to -0.007; $p=0.027$).

Conclusion: Birth weight at discharge increases with good birth temperature and the absence of maternal comorbidity. Length of stay increases with maternal comorbidity and low birth weight.

Keywords: low birth weight, length of stay, maternal comorbidity

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