IMPACT OF NUTRITIONAL STATUS AND MATERNAL BEHAVIOR TO INFANT GROWTH IN WEST JAKARTA

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ABSTRACT

Nutrition has a major role to determine of maternal and child health. Optimum nutrition in the early life is very important for long-term health status. Maternal behavior during pregnancy is closely related to the condition of the fetus. This study aims was to determine the impact of nutritional status and maternal behavior on infant growth in West Jakarta. This study was a cohort prospective, starting on July 2017 until January 2018. A total of 66 subjects of pregnant women aged (18-35 years) were willing to take part in the study from 37th weeks of pregnancy to delivery. Drinking alcohol, traditional herbs, medicines, and smoking are indicators of maternal behavior. Maternal IGF-1 concentrations, body weight, body length, and infant heart rate were indicators of infant growth. We used the Chi-Square test and Independent T-Test to answer research questions. Before pregnancy, BMI was 22.6±3.7, mid upper arm circumference (MUAC) 27.2±3.3cm, heart rate 89.0±18.3bpm, and weight gain during pregnancy (11.9±4.0)kg. The maternal behavior who consumed drugs, herbs, and smoking were 13.6%, 6.1%, and 3.0%, respectively. Maternal medical history; 19.7% nausea-vomiting, 24.2% hypertension, 39.4% swelling of the legs and face, 19.7% convulsions, 31.8% fever, 37.7% painful urination, yellow eyes/skin 21.2%, 24.2% dizziness, 22.7% tiredness, and 61.1% diabetes mellitus. Maternal behavior, medical history, body mass index, and weight gain were not significantly affecting infant growth (p>0.05). However, MUAC was a factor that affect to heart rate in infants (p<0.05). Nutritional status is one of indicator that affects to infant growth. Therefore, pregnant women need to more attention to keep their nutritional status, nutritional intake and healthy living behavior during pregnancy.

Keywords: Infant growth, maternal behavior, nutritional status, pregnant women