

EFFECT OF BIOPSYCHOSOCIAL FACTORS AND ENVIRONMENTAL SANITATION ON NUTRITIONAL STATUS OF CHILDREN UNDER FIVE YEARS OLD IN NGANJUK DISTRICT

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ABSTRACT

Background: One of the important public health issues in Indonesia is nutritional status, particularly in children under five years old. Lack of maternal awareness of dietary intake for their children may affect growth and development. This study aimed to investigate the effect of biopsychosocial factors and environmental sanitation on nutritional status of childrens in Nganjuk District.

Subjects and Method: This was an analytic observational study using cross-sectional design. The study was conducted at Loceret Community Health Center, Nganjuk District, East Java, from March to April 2017. A sample 136 children under five years old were selected for this study by fixed exposure sampling. The variable dependent was nutrition status measured in weight for age. The independent variables were dietary intake, history of infection disease, maternal stress, maternal education, family income, and environmental sanitation. The data were collected by anthropometry, medical record, and questionnaire. The data were analyzed by path analysis.

Results: Weight for age of children under five was affected by dietary intake ($b= 0.23$; $SE<0.001$; $p= 0.003$), maternal education ($b= 0.72$; $S.E= 0.28$; $p= 0.012$), and history of infectious disease ($b= 0.80$; $SE= 0.29$; $p= 0.007$). History of infectious disease was affected by environmental sanitation ($b= 0.31$; $SE<0.001$; $p<0.001$), and family income ($b= 0.25$; $SE= 0.05$; $p<0.001$). Dietary intake was affected by family income ($b= 0.58$; $SE= 0.21$; $p= 0.007$), history of infectious disease ($b= 12.31$; $SE= 3.20$; $p<0.001$), and maternal education ($b=7.39$; $SE=3.09$; $p=0.017$). Maternal stress was affected by family income ($b=-0.16$; $SE= 0.06$; $p= 0.008$).

Conclusion: Weight for age of children under five was directly affected by dietary intake, maternal education, and history of infectious disease. Weight for age of children under five was indirectly affected by environmental sanitation, family income, history of infectious disease, and maternal education.

Keywords: biopsychosocial, path analysis, environmental sanitation, nutrition status

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