

PATH ANALYSIS ON THE SOCIOECONOMICS DETERMINANTS OF THE COMPLEMENTARY FEEDING AND THE RISK OF WASTING IN CHILDREN UNDER FIVE

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ABSTRACT

Background: Wasting is one of the indicators of malnutrition known to contribute to the deaths occurring from childhood malnutrition. Wasting has been defined by World Health Organization (WHO) as weight for height < -2 SD of the WHO Child Growth Standards median. Worldwide, 52 million children under five years of age are wasted and most of the global burden of wasting (acute undernutrition) is found in developing countries. This study aimed to examine the socioeconomics determinants of the complementary feeding and the risk of wasting in children under five in Purworejo, Central Java, using path analysis model.

Subjects and Method: This was a cross-sectional study conducted at integrated community family health post (posyandu), Purworejo, Central Java. A sample of 160 children aged 2 to 5 years and their mothers was selected by fixed disease sampling. The dependent variables were complementary feeding and wasting. The independent variables were low birthweight (LBW), exclusive breastfeeding, history of illness (diarrhea and acute respiratory infection), maternal nutritional status during pregnancy, maternal age, maternal education, and family income. Wasting was measured by calculating the number of body weight per body height (kgBW)/cm and comparing with Z score. The data of maternal nutritional status during pregnancy were taken from mid-upper arm circumference (MUAC) measurement in maternal and child monitoring book. The other variables were collected by questionnaire. The data were analyzed by path analysis using Stata program.

Results: The risk of wasting increased with LBW (b= 1.37; 95% CI= 0.35 to 2.39; p= 0.008) and decreased with appropriate complementary feeding (b= -3.65; 95% CI= -5.72 to -1.59; p= 0.001). Complementary feeding increased with exclusive breastfeeding (b= 1.95; 95% CI= 1.16 to 2.73; p< 0.001) and higher family income (b= 1.42; 95% CI= 0.61 to 2.23; p= 0.001). The risk of wasting was indirectly affected by exclusive breastfeeding, history of illness (diarrhea and acute respiratory infection), maternal nutritional status during pregnancy (MUAC <23.5 cm), maternal age, maternal education, and family income.

Conclusion: The risk of wasting in children under five increases with LBW and decreases with appropriate complementary feeding. Complementary feeding increases with exclusive breastfeeding and higher family income.

Keywords: wasting, complementary feeding, socioeconomics, determinant

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