

FACTORS ASSOCIATED WITH STUNTING AND WASTING IN CHILDREN AGED 12-48 MONTHS: AN EVIDENCE FROM LAMPUNG

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ABSTRACT

Background: Stunting and wasting are a growth disorder in children under five. Stunting impedes human development, globally affecting 162 million children under five. Stunting is generally caused by recurrent acute malnutrition, whereas wasting occurs due to short-term malnutrition. Wasting indicates a recent and severe process of weight loss, which is often associated with acute starvation and/or severe disease. The prevalence of wasting is usually below 5% even in poor countries. Wasting is caused by the same factors that contribute to stunting. If untreated properly, stunting and wasting may cause low intelligence in adult life. This study aimed to determine factors associated with stunting and wasting in children aged 12-48 months.

Subjects and Method: This was a case-control study conducted at Mulya Asri, Panaragan, and Dayamurni community health centers, Lampung, from January to February 2018. A sample of 150 children under-five was selected for this study by fixed disease sampling. The dependent variables were stunting and wasting. The independent variables were birthweight, maternal knowledge, maternal education, maternal nutritional status (mid-upper arm circumference/ MUAC), exclusive breastfeeding (EBF), upper respiratory tract infection (URTI), diarrhea, lack of clean water, poor sanitation. The data were collected by questionnaire and maternal and child health monitoring book. The data were analyzed by a logistic regression.

Results: The risk of stunting increased with poor maternal knowledge (OR= 5.29; 95% CI= 1.30 to 21.54; p=0.002), low maternal education (OR=10.25; 95%CI= 2.26 to 46.79; p=0.003), poor maternal nutritional status (OR= 8.87; 95%CI= 2.14 to 36.74; p=0.003), low birthweight (OR= 9.86; 95%CI=2.60 to 37.47; p=0.001), no EBF (OR= 5.70; 95%CI= 1.59 to 20.46; p=0.008). The risk of wasting increased with poor knowledge (OR= 10.95; 95%CI= 2.14 to 56.91; p= 0.004), low family income (OR= 7.04; 95%CI= 5.51 to 32.78; p=0.013), low birthweight (OR= 14.71; 95%CI= 2.74 to 79.06; p=0.002), URTI history (OR= 4.87; 95%CI= 1.23 to 19.38; p=0.024), diarrhea (OR= 6.09; 95%CI= 1.42 to 26.20; p=0.015), a lack of clean water (OR= 9.78; 95%CI= 2.26 to 42.36; p=0.002), and poor sanitation (OR= 7.67; 95%CI= 1.85 to 31.75; p=0.004).

Conclusion: The risk of stunting and wasting are affected by birthweight, URTI history, diarrhea, EBF, maternal nutritional status, maternal knowledge, maternal education, family income, lack of clean water, and poor sanitation.

Keywords: stunting, wasting, biopsychosocial, determinants

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