

Risk factors for undernutrition in children under five years of age in Tenom, Sabah, Malaysia

ABSTRACT

Undernutrition is the result of complex interplay of factors such as household food security, childcare, feeding practices, nutrition and sanitation. Therefore, this study aimed to determine the prevalence of stunting, wasting, underweight based on WHO child growth standards 2006 and undernutrition based on Composite Index Anthropometric Failure (CIAF) and its association with the biological, behavioural, socio-economic and physical environment factors among children under-5 years. This was a cross sectional study involving children aged between 6 and 59 months recruited through stratified random sampling from the Tenom district. Sociodemographic background was obtained from mothers via a questionnaire. Height and weight measurements were measured using standardised instrument. The height-for-age, weight-for-age and BMI-for-age were classified according to the WHO Child Growth Standard 2006. Bivariate analysis and multivariate logistic regression analysis were conducted. The prevalence of undernutrition based on CIAF was 42.3%, underweight 34.7%, stunting 33.3% and wasting 10.0%. After adjusting for all confounders, childhood undernutrition was significantly associated with unimproved sanitation (adjusted OR 2.98, 95% CI: 1.082 to 8.225) and frequent illness (adjusted OR 2.07, 95% CI: 1.015 to 3.274). These findings support the association of biological and physical environmental factors with the nutritional status of children under-5 years old.