Prevalence and determinants of stunting in children under the age of five, in Bisho, South Africa

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Abstract

Childhood stunting is the most prevalent form of chronic malnutrition, affecting 149 million children under the age of five worldwide. As the determinants of stunting are complex and multicausal, it is important to look at area specific determinants and determine whether these are similar to the general determinants. This study investigated the prevalence and determinants of stunting in children under the age of five, visiting Bisho Hospital clinic in the Eastern Cape, South Africa. A cross-sectional, qualitative design was used. All children under the age of five, visiting Bisho Hospital's clinic during the data collection period, and whose mothers provided consent, were included in the sample of 219 participants. An interview-administered questionnaire was used to determine possible factors that may play a role in stunting. Anthropometrical measurements (height, weight and mid-upper arm circumference) were used to calculate z-scores for the children. IBM SPSS Statistics 26 (version 24.0) was used for statistical analysis. Dietary diversity was calculated with a seven food group classification. The prevalence of stunting was 47.5 %, of which 57.7 % were classified as moderately stunted, and 42.3 % severely stunted. There was a significant correlation between the participants' main form of sanitation and stunting in all age groups ($p = 0.007$; Cramer's $V = 0.413$ and $p = 0.04$; Cramer's $V = 0.326$, respectively). A statistical significance was found between the child support grant and stunting ($p = 0.032$) in children younger than six months, but not in the older group. No statistical significance was found between other determinants of stunting that were analysed. As stunting is multi-causal, it requires a combination of nutrition-specific and nutrition-sensitive interventions, together with strong political and financial commitment from stakeholders to eradicate stunting in children.

Keywords: Stunting, Children, Sanitation, Infections, Breastfeeding