## Factors associated with child nutritional status in the Karachchi DSD in the Kilinochchi district: A case study

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Malnutrition is a global health problem that is particularly common in children in the developing world. This has been a stagnant problem over the last several decades in Sri Lanka as well, especially in the North and East. The primary focus of this research is to identify factors associated with child malnutrition in the Karachchi Divisional Secretariat Division (DSD) in the Kilinochchi district. This study used secondary data of a baseline study conducted by World Vision Lanka in 2018 and considered a sample size of 277 households with children under five years of age in the Karachchi DSD. The nutritional status of the children was considered as the response variable which is classified as nourished and malnourished. In addition, twenty variables describing demographics, information on the parents, dietary habits etc., were considered as explanatory variables in this study. Both descriptive and inferential statistics were used to analyze the data. Since the response variable is dichotomous, binary logistic regression was used to identify the factors significantly associated with the nutritional status of the children. The descriptive analyses show that the overall prevalence of stunting is 21.66%, wasting is 12.64% and underweight is 17.69%. The logistic model reveals that the nutritional status of the children under five years of age in the Karachchi DSD is significantly associated with four of the twenty explanatory variables which were tested to explore the relationship. The four explanatory variables explicitly are birth weight, mothers' education level, dietary diversity of the children and the number of family members. The nutritional status of the children increases with the increase in birth weight, mothers' education level and dietary diversity of the children, and in contrast, the nutritional status of the children reduces with the increase in the number of family members in the household.

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