DIETARY DIVERSITY AND UNDERWEIGHT AMONG UNDER FIVE CHILDREN IN RURAL AREA

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Abstract

In Myanmar, estimated 23% of under five children were underweighted while 4% of them were severely underweight and only 25% of 6-23-month children were receiving minimum dietary diversity. The aim of the study is to determine association between dietary diversity score and underweight among under-five children in rural area. This study used the data from “Livelihood and Food security survey" which was a cross-sectional study done in rural area during 2016 at Chin state, Magway region and Ayeyarwady region. The study used probability proportional to size sampling method and 2029 under five children were included. Underweight (weight for age < -2SD) is used as outcomes variable. Dietary diversity score is calculated consuming different food groups within a given reference period. The child characteristics – age and sex; maternal characteristics – age, education and autonomy; household characteristics – wealth status, household size, food-security, livelihood, region, drinking water, sources of water and types of toilets were used as a covariates. The data was analyzed by using STATA (version 15.1). The prevalence of underweight in Chin, Magway and Ayeyarwady region were 31.4% (95%CI: 26.0, 37.3), 19.4% (95%CI: 15.9, 23.6) and 26.1% (95%CI: 23.3, 29.1), respectively. The prevalence of children who had met minimum dietary-diversity-score in these regions were 17.% (95%CI: 13.4, 21.4), 48 % (95%CI: 42.5, 54.1) and 24.1% (95%CI: 19.8, 29.0,). Multivariable binary logistic regression model showed that the odds of underweight in children who did not meet with dietary-diversity score was 1.4 times higher than those with children who met with dietary-diversity score(aOR = 1.41; 95%CI:1.05, 1.90). Moreover, the children age, types of toilets, household size and region were independent predictors of underweight This study concluded that the consumption of diverse food groups was significantly influenced the underweight status among children under five in rural area and found to be highest burden in Chin state. Health education on giving diverse food and community nutritional intervention program should be performed in the regions with high prevalence. Further research should be conducted using a mixed method approach to explore the reasons for why rural mother could not provide diverse food to their children and mother's cultural and traditional beliefs on child nutrition.