MULTILEVEL LINEAR REGRESSION ANALYSIS OF FACTORS INFLUENCING BODY MASS INDEX AMONG BANGLADESHI MARRIED NON-PREGNANT WOMEN

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Summary. The aim of this study was to investigate the socioeconomic and demographic factors influencing the body mass index (BMI) of non-pregnant married Bangladeshi women of reproductive age. Secondary (Hierarchy) data from the 2011 Bangladesh Demographic and Health Survey, collected using two-stage stratified cluster sampling, were used. Two-level linear regression analysis was performed to remove the cluster effect of the variables. The mean BMI of married non-pregnant Bangladeshi women was 21.60±3.86kg/m², and the prevalence of underweight, overweight and obesity was 22.8%, 14.9% and 3.2%, respectively. After removing the cluster effect, age and age at first marriage were found to be positively (p<0.01) related with BMI. Number of children was negatively related with women’s BMI. Lower BMI was especially found among women from rural areas and poor families, with an uneducated husband, with no television at home and who were currently breast-feeding. Age, total children ever born, age at first marriage, type of residence, education level, level of husband’s education, wealth index, having a television at home and practising breast-feeding were found to be important predictors for the BMI of married Bangladeshi non-pregnant women of reproductive age. This information could be used to identify sections of the Bangladeshi population that require special attention, and to develop more effective strategies to resolve the problem of malnutrition.