



Age and Sex Variations in Undernutrition of Rural Bengalee Primary School Children of East Midnapore District, West Bengal, India

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ABSTRACT High prevalence of low birth weight, high morbidity and mortality in children, and poor child health are major nutritional concerns in India. In addition, the Indian population is passing through a nutritional transition and is expected to witness higher prevalence of adult non-communicable diseases such as diabetes, hypertension and coronary heart disease according to the '*fetal origin of adult disease hypothesis*'. Although nationwide intervention programmes are in operation over the past two decades, the situation has not changed greatly. Clearly, there is a need for examining several issues of nutritional significance for effective planning of interventions. In particular, maternal nutrition and fetal growth relationship, long term effects of early life undernutrition, interactions of prenatal nutritional experiences and postnatal undernutrition are some of the major issues. Malnutrition (undernutrition or overnutrition) is a problem at varying proportions in developing countries, and anthropometry is a simple tool to assess its magnitude in children. This community-based cross-sectional study was undertaken to determine the magnitude of undernutrition among 549 school children (boys = 291 and girls = 258) aged 5-9 years of rural areas of East Midnapore district of West Bengal in India. The collected data was analyzed using the recommended indices of height-for-age (stunting) and weight-for-age (underweight) based on the NCHS standard. Prevalence of stunting (overall = 29.7%, boys = 29.6%, girls = 29.8%) and underweight (overall = 53.4%, boys = 54.6%, girls = 51.9%) was alarming among the children studied. There was no significant sex difference in nutritional status. Moreover, the age variations in stunting and underweight demonstrated similar age-trends for both sexes. Relative to undernutrition levels identified in other Third World countries, rural Bengalee children of the present study had very high rates. Thus, this study provided evidence that undernutrition is still a leading problem among rural Bengalee primary school children of West Bengal and this has not improved in spite of nutrition intervention programmes which are currently in operation.

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