



Low Obesity and High Undernutrition Prevalence in Lower Socioeconomic Status School Girls: A Double Jeopardy

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KEYWORDS Adolescent Girls. Undernutrition. Obesity Socioeconomic. Status

ABSTRACT Despite the escalating problem of obesity, underweight remains a major problem in developing countries and currently these countries are facing a double burden of nutrition related conditions. To determine the prevalence of obesity as well as underweight in school children belonging to a low socioeconomic status we performed serial studies in a girls' school. All students from class 6th to 12th (age range 11-17 years) who did not have a recent major illness were evaluated for height and weight. Body mass index (BMI) was calculated. Undernutrition was diagnosed using the Indian Council of Medical Research guidelines. Prevalence of obesity was determined using > 95th percentile BMI cut-off and overweight between 85th and 95th percentile. A recently proposed age-specific BMI cut-off suggested by a World Health Organisation study group was also used to determine obesity in these children. 1224 girls were examined in 1997 and 915 in 2003. The mean BMI in the two years was 16.9 ± 1.4 and 16.8 ± 1.2 kg/m². The overall prevalence of overweight was 10.9% and 10.5% and obesity was 5.5% and 6.7% in 1997 and 2003 respectively ($p = n.s.$). Using the newer age-specific criteria overweight was diagnosed in 2.3% in both examinations and obesity in 0.2% and 0.3% respectively ($p = n.s.$). There was a high prevalence of wasting in both the examinations although there was a decline in its prevalence (36.1% in 1997 and 27.7% in 2003, $p < 0.01$). Prevalence of overweight and obesity in low socioeconomic schoolgirls is lower than previously reported Indian studies from metropolitan cities. Prevalence of wasting as a marker under nutrition is high although there is a decline in its prevalence in serial examinations.

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