

Anthropometry and Twin Epidemic of Malnutrition among Urban Population of Varanasi

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Abstract

Background & Objective: *As life expectancies increase and the major causes of death shift to the chronic and non communicable diseases, Indian population is increasingly facing modern risks due to overweight and obesity and other diet-related factors. As a result, people are facing a growing burden from the modern risks to health, while still fighting an unfinished battle with the traditional risks that results in dual burden of risks and diseases. This study aims at estimating the prevalence of under nutrition and over nutrition based on anthropometric indices.*

Methods and Materials: *A community based cross-sectional study with multi-stage sampling design was conducted among urban population of Varanasi aged 25-64 years living in the selected area. A predesigned and pretested proforma was used to collect the basic characteristics of total 640 study subjects. Anthropometric measurements (height, weight, waist circumference and hip circumference) were recorded by following standard procedures. WHO International and Asia pacific guidelines for BMI were used to define CED, overweight and obesity. Waist circumference and WHR for identifying abdominal obesity were defined by Indian guidelines.*

Results: *Mean height and weight of male subjects (n=301) were 167.5 ± 7.5 cm and 66.8 ± 12.5 kg, respectively and height and weight of female subjects (n=339) were 153.5 ± 6.01 cm and 57.6 ± 10.2 kg, respectively. Mean BMI was higher among female (24.4 ± 3.92 kg/m²) than male subjects (23.8 ± 3.95 kg/m²). The prevalence of CED, overweight and obesity were 8.6%, 22.8% and 38.3 % by Asian classification and 8.6%, 29.1% and 9.3% by Global classification, respectively. The prevalence of thinness was higher among males, whereas prevalence of overweight and obesity was higher among female. Prevalence of abdominal obesity was higher among females as compared to their male counterparts.*

Interpretation & Conclusion: *In this study of community based sample in urban Varanasi, prevalence of both under nutrition and over nutrition was observed. Abdominal obesity was a major problem, as abdominal obesity poses people to more disease risk and morbidity than general obesity. Preventive measures are needed to maintain nutritional status and overall health.*

Keywords: *Malnutrition, Anthropometry, Urban Varanasi, Obesity, Under nutrition.*