

Body Mass Index: The functional significance of cut-of-value in reproductive age group women belonging to Varanasi city

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In developing countries the nutritional status of women of reproductive age group is far from satisfactory. Since, childhood to adulthood it is a long-term chronic nutritional deprivation results in poor body size of the mother. If anthropometric measurements are recorded over a period of time, they reflect the patterns of growth and development and how individuals deviate from the average at various ages in body size, build and nutritional status. This study was conducted on women belonging to afferent society and used indicator of BMI viz., previous WHO Criteria for all and Asia Pacific Criteria gave a functional significance of cut off value to assessed the accurate status of women in their living society. The objective of the study was to assess the nutritional status of the subjects on the basis of their anthropometric measurements and second was to compare between Previous WHO Criteria and Proposed Asian Criteria for BMI. The study was conducted in four selected wards of Varanasi city, with the aim of delineating nutritional status as per BMI of urban women. The desired sample size for this cross-sectional study was of 310 women of reproduction age groups (*i.e.* 15 to 49 years) were considered as study subjects. Multistage random sampling was followed in the present investigation. By using previous WHO Criteria and Proposed Asian Criteria 36.77 per cent and 29.03 per cent subjects were characterized as normal, respectively in prevalence of obesity was 1.29 per cent and 7.42 per cent using previous WHO criteria and Proposed Asian Criteria, respectively.

Key Words : Nutritional status, Reproductive age group, Previous WHO criteria, Proposed Asian Criteria, Body Mass Index

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INTRODUCTION

Anthropometry predominates over other methods of nutritional assessment is still considered the most practical and useful means for the assessment of nutritional status of the population. For a long time we used to refer WHO criteria for evaluation of BMI. However, after several years result showed that it was right for the developed countries. In India, women were noticed to be worst suffers *i.e.* 57.1 per cent suffering from CED (BMI < 18.5) while per cent of normal and obese females were 36.3 and 6.6, respectively.

The women nutrition database comprised of approximately 1500 records, from 340 studies considered; four

indicators of PEM of adult women viz., height, weight, and BMI and arm circumference. Each study was coded by five different sub grouping that included the following: Physiological status (pregnant, non-pregnant, and lactating), age (usually reproductive age women, although adolescents and elderly women were also reported) location (urban, rural) country group/region. Parity and income group (low, middle, high). The main problem related to the analysis of each outcome indicators was the varying cut-offs used different surveys. These indicators are:

Indicators	Cut-off to indicate problems
Height	< 145 cm (stunting)
Weight	< 45 Kg (under weight)
Body mass index	< 18.5 (wasting)
Mid-upper arm circumference	<22.5 cm (low arm circumference)

(Encyclopaedia of Health and Nutrition (3); 2002)

More recently, both biological and socio-economic landmarks bracketing the transition to adulthood had moved

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