

Author Reply

Sir,

We thank the authors of the letter to the editor for showing keen interest and their valuable comments. The authors have raised certain important questions and we wish to clarify the same.

- The main objective of the study was to assess the anthropometry of school children, 5-18 years of age and thereby estimate the prevalence of childhood thinness, overweight, and obesity.^[1] As age and sex are biological variables, particularly for anthropometry, prevalence of the above was estimated for different age groups and males and females separately. Because socioeconomic class is not a biological variant, we have not classified it in the analysis. However, meticulous be the data collection on socioeconomic status and its classification, this one variable is highly prone for bias, and misclassification invariably occurs from study to study
- Percentiles are useful for giving the relative standing of an individual in a population and are also useful to compare individuals in different populations. Another way to compare individuals in different populations is with Z-scores that measure relative standing of an individual to the mean of a population using the standard deviation for that population. We preferred using percentiles instead of Z-scores
- We are also of the same opinion that growth reference charts need to be updated every decade. Our only concern is the selection of the population used for developing growth charts. In view of this, we would like to quote the article from Lancet having the following points. “The argument against best-off standards is that the best off in most countries grow up earlier and end up taller.” “Is early maturation and large size advantageous?” The economically privileged growing in the so called “optimum” environment are actually doing so in the most “sophisticated” or technologically advanced environment. “It may be inappropriate or even harmful to use standards derived from an economically privileged group and applying to the whole population”^[2]
- In view of the above, we included in our study all children 5-18 years except children with disabilities or with chronic illness without restricting to children growing in affluent/privileged environment. This inclusion strategy becomes more important when cut points are given based on percentiles of data arbitrarily, e.g. above 95th percentile as obese. When we use data

only from urban affluent children giving cut points based on above 95th percentile for obesity, it will most probably result in underestimation of obesity in children

- It is seen from many studies that the prevalence of overweight and obesity is higher among urban compared with rural and upper socioeconomic class compared with middle or lower socioeconomic class children, and thus residence and affluence become important determinants of children’s nutrition status. Including only urban and affluent children for generating reference standards will nullify the effect of these important determinants.^[3-6]

**V Kumaravel, S Vanishree¹, M Anitharani¹,
BWC Sathiyasekaran¹**

Institute of Diabetes and Endocrinology, Alpha Hospital and Research Center, Madurai, Tamil Nadu, ¹Department of Community Medicine, Sri Ramachandra Medical College and Research Institute, Porur, Chennai, Tamil Nadu, India

Corresponding Author: Dr. Vanishree Shriram,
Community Medicine, Department of Community Medicine,
Sri Ramachandra Medical College and Research Institute,
Porur, Chennai, Tamil Nadu, India.
E-mail: docvanishri@yahoo.com

REFERENCES

1. Kumaravel V, Shriram V, Anitharani M, Mahadevan S, Balamurugan AN, Sathiyasekaran B. Are the current Indian growth charts really representative? Analysis of anthropometric assessment of school children in a South Indian district. *Indian J Endocr Metab* 2014;18:56-62.
2. Goldstein H, Tanner JM. Ecological considerations in the creation and the use of child growth standards. *Lancet* 1980;1:582-5.
3. Ramachandran A, Snehalatha C, Vinitha R, Thayyil M, Kumar CK, Sheeba L, *et al.* Prevalence of overweight in urban Indian adolescent school children. *Diabetes Res Clin Pract* 2002;57:185-90.
4. Kotian MS, S GK, Kotian SS. Prevalence and determinants of overweight and obesity among adolescent school children of South Karnataka, India. *Indian J Community Med* 2010;35:176-8.
5. Saraswathi YS, Najafi M, Gangadhar MR, Malini SS. Prevalence of childhood obesity in school children from rural and urban areas in Mysore, Karnataka, India. *J Life Sci* 2011;3:51-5.
6. Laxmaiah A, Nagalla B, Vijayaraghavan K, Nair M. Factors affecting prevalence of overweight among 12-to17-year-old urban adolescents in Hyderabad, India. *Obesity (Silver Spring)* 2007;15:1384-90.

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