

The World Health Organization Body Mass Index Curves for Iranian Children

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Dear Editor,

I am writing in response to a letter that was published in your valuable journal regarding our publication.¹ Firstly, we would like to express our gratitude to Al-Mendalawi for his valuable time in reviewing our paper and providing insightful comments.² The central concern raised was about the appropriateness of using the World Health Organization (WHO) body mass index (BMI) curves, specifically for Iranian children. The author noted that there are locally derived BMI curves for Iranian children with key centiles and national cut-offs based on a specific Iranian research study.³

Various growth charts have been developed using national or international samples in studies conducted by different organizations with diverse populations.⁴ The most significant and widely used growth charts include those devised by the WHO in 2006/2007, the Centers for Disease Control and Prevention in 2000, and the International Obesity Task Force in 2012.^{5,6}

It is worth mentioning that numerous Iranian studies have employed the WHO BMI-z score or other international growth charts to assess children's growth across different age groups.⁷ The WHO-BMI growth charts are officially endorsed by the Iranian Ministry of Health and Education and are utilized for evaluating child growth in Public Health Centers across the country.⁸

The author of the letter referenced a specific study conducted on a research basis³, and it is important

to note that the database from this study has not yet received official endorsement from the Iranian Ministry of Health or Education. Furthermore, the BMI-z scores in this study were limited to children and adolescents aged 6-18 years, whereas our paper included analysis of infants at birth and one year of age. Additionally, their findings indicated that the BMI curves for children closely aligned with the WHO BMI curves, except for the fifth percentile, which was lower in Iranian children.³

In conclusion, while we acknowledge the importance of utilizing in-country standards, it is essential to highlight that Iranian Health Centers, along with numerous studies and publications both in Iran and globally, have consistently employed WHO BMI-z scores for age in assessing children's growth.

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