

Double Burden of Malnutrition in Under-Five Children (NFHS-5 Data) Using Extended CIAF: WHO 2006 Growth Standard Versus 2019 Indian Growth References

Original Article

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ABSTRACT

OBJECTIVES

To compare the double burden of malnutrition (DBM) in under-five children using extended composite index of anthropometric failure (eCIAF) using WHO 2006 and 2019 Indian standards.

METHODS

Data of 2,32,920 under-five children as per National Family Health Survey-5 were eligible for inclusion. Incomplete records and extreme z-scores were excluded. eCIAF categories included: A No failure; B Wasted; C Wasted + Underweight; D Wasted + Stunted + Underweight; E Stunted + Underweight; F Stunted; G Stunted + Overweight; H Overweight; Y Underweight; Underfailure (UF): A + B + C + D + E + F + Y; Overfailure (OF): G + H.

RESULTS

Records of 1,96,015 under-five children were analyzed. 50.1% versus 74% children were categorized as no failure using WHO and Indian standards, respectively ($P < 0.001$). Prevalence of DBM, UF and OF using WHO reference was significantly higher than using Indian references [49.9% vs. 26%; 48.4% vs. 24.7%; 3.5% vs. 1.9%, respectively].

CONCLUSION

Using Indian references prevents misclassification of DBM in under-fives.

Keywords: Composite index of anthropometric failure · National Family Health Survey · NFHS-5 · Overnutrition · Undernutrition

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