

## Prevalence of and factors associated with underestimation of body weight among secondary school children in Karachi, Pakistan

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### Abstract

**Objective:** To determine the prevalence of and factors associated with underestimation of bodyweight among secondary school children.

**Methodology:** It was a school based, cross sectional study conducted in Karachi. Study population was school children of grade 9-10 (boys and girls). Data was collected through self administered questionnaire followed by anthropometric measurements. Multistage stratified, cluster sampling technique was used. Study was approved from Ethical Review Committee of Aga Khan University. Outcome variable “underestimation of body weight” was assessed by students’ verbal response and actual body mass index. The statistical analysis was carried out on software SAS. Multivariable logistic regression technique was applied to determine the factors associated with underestimation of bodyweight.

**Results:** A total of 917 students participated from seventeen schools. The mean ( $\pm$ SD) age of students was 15 ( $\pm$ 1.3) years. Prevalence of overweight and obesity was found to be 8.6%, 3.6% respectively. The overall prevalence of underestimation of bodyweight was 14.7%. Among boys it was 20% (95% C.I:16.4-23.6), whereas among girls it was 9.1% (95% C.I:6.4-11.8). The underestimation of bodyweight was associated with male gender [aOR=3.36 (95% C.I:1.41-8.00)], high socioeconomic status [aOR=5.58 (95% C.I:2.25-13.79)], number of sibling greater than three [aOR=0.59 (95% C.I:0.40-0.89)], and overweight/obese students [aOR=11.54 (95% C.I:4.03-33.06)].

**Conclusion:** The high prevalence of underestimation of body weight among school children points toward urgent multifaceted efforts at family, schools and society level. This will prevent childhood morbidity and mortality as well as adulthood obesity, chronic diseases and ultimate overall mortality.

### Biography

Sajid Mahmood earned his MBBS degree in 2005 followed by MSc. Epidemiology & Biostatistics degree in 2009. Recently he completed his Master of Public Health programme from United Kingdom. At the moment he is doing his PhD (public health) from University of Sheffield, UK. His area of interest is childhood obesity and its prevention. He has published couple of papers in reputed journals even during his student life. He is a member of International Epidemiological Association (IEA) and reviewer of Journal of Pakistan Medical Students (JPMS).