

Prevalence of overweight, obesity, and associated factors among adolescents in the occupied Palestinian territory: a cross-sectional study

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Abstract

Background Overweight and obesity are multifactorial conditions that are spreading fast in both developing and developed countries. They are emerging as a major public health threat among children and adolescents, and present a serious morbidity and mortality burden. Adolescence is a critical period in which lifestyle and dietary behaviours are shaped that persist into adulthood. Therefore, adolescents are an ideal study target in terms of estimating the magnitude of the problem, understanding its risk factors and investigating potential effective intervention programmes. This study assesses the prevalence of overweight, obesity, and associated factors among adolescents in Palestinian schools.

Methods Weighted analysis was conducted on data from the Palestinian Micronutrient Survey, a national cross-sectional study carried out in 2013 by the Palestinian Ministry of Health in collaboration with UNICEF. For sample selection, stratified cluster random sampling was used. This school-based survey involved 2400 male and female adolescents aged 15–18 years in government schools in the West Bank and Gaza Strip. Data were analysed at univariate, bivariate, and multivariate levels, by the use of proportions, confidence intervals, and logistic regression. In the original survey, written informed consent was obtained from parents and guardians of the participants. A letter of approval to use the study data was obtained from the Ministry of Health (who own the data). The study was also approved by the Ethics Committee of the Institute of Community and Public Health.

Findings The analysis indicates a prevalence of 23·6% (95% CI 20·6–26·5) for overweight and obesity, with a prevalence of 26·1% in the West Bank and 19·5% in the Gaza Strip. The multivariate analysis revealed that the likelihood of overweight and obesity was significantly higher for adolescents from the West Bank than from the Gaza Strip, for those eating two main meals or less than for those eating three meals, for those who reported a high frequency of vegetable intake, and those who observed a diet for weight loss.

Interpretation The data suggest that one in every four adolescents is overweight or obese, which is an alarming statistic and calls for attention. The high prevalence can be attributed to different lifestyles, eating behaviours, and dietary intake, which affect energy balance. These factors should be investigated within social, political, and economic contexts, and addressed comprehensively, first at the level of individuals and family, and then at the level of schools and the community. It should be noted that the original study included students in the 10th grade and 11th grade only, whereas adolescence covers a wider age group (10–19 years).

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Contributors

ROS wrote the abstract and performed the statistical analysis with input from RG and AH. RG and AH reviewed the analysis and edited the drafts of the Abstract. All authors have seen and approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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