

## Child Obesity 2018: Evaluation of the obesity contributing factors in first grade elementary school students from Sari, North of Iran- Melody Omraninava, Islamic Azad University, Iran

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Obesity in children has raised the worries about public health and hygiene. In this study, we intended to evaluate the obesity rate among the children first grade elementary schools throughout the Sari, north of Iran. Moreover, we evaluated the possible effects of mother's life conditions on the estimation of obesity in children. In this descriptive cross sectional study, the study population included first grade elementary school students in Sari. Sampling was carried out through multistage and stratified randomization at level of the target students. Using stadiometer and digital scales, the height and weight were measured. Body mass index (BMI) was also calculated. A questionnaire about feeding habits and socio-economic status of parents was employed. Data collection was conducted using phone interview with parents as well as the questionnaire's records. Analysis of data was conducted in SPSS using suitably statistical tests. IBM SPSS Amos software was utilized for path analysis.

**Methods:** In this descriptive cross sectional study, the study population included first grade elementary school students in Sari, north of Iran. Sampling was carried out through multistage and stratified randomization at level of the target students. Using stadiometer and digital scales, the height and weight were measured. Body Mass Index (BMI) was also calculated. A questionnaire about eating habits and socio-economic status of parents was employed. Data collection was conducted using phone interview with parents as well as the questionnaire's records. Analysis of data was conducted in SPSS v.22 using suitable statistical tests. IBM SPSS Amos

software was utilized for path analysis.  $P < 0.05$  was considered as statistically significant. It was observed that 15% of the evaluated cases were obese. There was an association between BMI of the obese cases and lifestyle-related habits. Path analysis revealed significant impression of patient's habitus on the obesity of children. In this study, the path analysis method was used to analyze the data and to evaluate the goodness of fit using the IBM SPSS Amos software. The path analysis is used to test the causal models and requires the setting of the pattern as a causal diagram and helps to identify what we are searching for. In the path analysis, the coefficient of determination is used, hence it is possible to evaluate the suitability of the model. Moreover, using the beta weight, which is called coefficient path in the path analysis, it is possible to determine the effect value of each variable. In addition, path analysis enables us to understand the mechanism of the effect of the variables on each other and to determine how much direct or indirect is the effect of each variable. In other words, path analysis provides a lot of information about the causal processes in a straightforward and understandable way (26). In the path analysis method, there are several indexes for examining the fit of tested patterns, among which, root mean square error approximation (RMSEA), chi-square ratio to freedom gap ( $\chi^2 / df$ ), and ultimately insignificant quasi-test Chi ( $P \geq 0.05$ ) are main indexes of fit model in path analysis. Other indexes such as NFI, CFI and GFI represent the optimal fit pattern in structural equations such as path analysis