

Fahimeh Soheilipour¹, MD, Zeinab Pourzahabi, Maryam Lotfi, Maziar Moradi-Lakeh, MD, Atefeh Ghanbari Jolfaie, MD

1- Assistant professor of Pediatric endocrinology and Metabolism, Minimally Invasive Surgery Research Center, Iran University of Medical Sciences, Tehran, Iran.

BACKGROUND: Obesity has a permanent effect on children's health and acts as a major risk factor for chronic diseases. Therefore considering the children's BMI is a vital parameter at each visit. This study was performed to measure prevalence of obesity and its determinants in school children of Zahedan in Iran; Zahedan is the capital of Sistan-and-Balouchestan province which is known to have the highest prevalence of underweight in Iranian children.

METHODS: This cross-sectional study was performed on 3582 school children among which 1786 were girls and 1796 were boys. The students were aged between 6 to 13 years old and were selected based on a stratified random method. The body mass index (BMI) was measured for each student and being overweight/obesity was determined based on CDC 2000 definitions. Prevalence proportions were estimated by weighing the sample. The study was done at the primary and guidance schools of Zahedan; samples were stratified from 2 geographic regions of Zahedan.

RESULTS: In the sample, 78.9% were under 85th percentile, 11.8% were overweight (85th-95th percentile) and 9.3% were obese (>95th percentile). Weighted estimate for prevalence of obesity/overweight in girls, boys and all 6-13 years old students were 16.2%, 18.4% and 17.4%, respectively. Presence of overweight/obesity was related to school type (private to public schools OR=2.13, 1.80-2.52) and increasing age (OR=1.12, 1.04-1.20).

CONCLUSIONS: A high prevalence of obesity was found in Zahedan students. Concurrent high prevalence of obesity/overweight and underweight demonstrates amplitude of weight problems in school children. The results of this study show an urgent need for special health programs to conduct proper diagnosis and management of obesity in Zahedan.

