Abstract

The prevalence of obesity among Mexicans is alarming in both the child and adult populations. The objective of this study was to determine the levels of overweight, obesity and abdominal obesity in pre-school (PS), elementary (ES), and middle high (MHS) public school children from Tijuana. From February to April of 2011, a biennial random sample was selected by cluster method of 30 PS, 30 ES, and 30 MHS children. And a sample of 30 groups for each level was chosen. Twenty elementary teachers and eight graduate students were trained at one central location on how to take anthropometric measurements using a portable scale, a stadiometer, and a measuring tape to determine weight, height, and waist circumference. Body Mass Index values were computed and compared to age/ gender BMI percentiles according to WHO criteria. Waist circumference for-age at the 90th percentile from NHANES III (Mexican-American) was used to define abdominal obesity. The sample was composed of 646 PS children, 961 ES children, and 1,095 MHS children. Their ages ranged from 4- 16 years. Results showed an overall prevalence of overweight and obesity in younger than 5y preschool children (> 2 SD) of 23.1%, in 5 y PS (> 1 SD) of 33.8%, in ES children of 46.3%, and in MHS children of 41.9%. Abdominal obesity in PS children was 18%, in ES children was 16.7%, and in MHS children was 15.2%. These results warrant immediate and comprehensive actions to prevent a critical public health problem in Mexico.

Keywords