Abstract

Background: Overweight and eating disorder (ED) are major public health problems in adolescents. Aims: To assess the association of overweight, body composition and anthropometric characteristics with the probability being at risk of ED. Methods: A two-phase study was used. 329 girls and 96 boys (aged 12-18 years) from an initial sample of 2967 adolescents were studied. The BMI, percentage of fat mass estimated by bioimpedance (FM (BIA)), waist circumference, waist-to-height ratio, and waist-to-hip ratio (WHipr) were calculated. The Eating Attitudes Test, Youth’s Inventory-4 and a questionnaire to evaluate social influences were administered. Results: A total of 34.7% of girls and 53.6% of boys at risk of ED were overweight (including obesity). For girls, overweight frequency was significantly higher in risk ED group than in control group. Increases of one point in the BMI or FM (BIA) increased the probability of being at risk of ED by 12% (3.0-19.0) and 4% (0.0-8.0), respectively. An increase in WHipr was negatively associated with ED risk. Smoking and symptoms of dysthymia and the generalized anxiety disorder also increase the probability of being at risk of ED in adolescent girls. In adolescent boys, these relations were not observed. Conclusions: The higher BMI and the percentage of FM (BIA) are associated with greater risk of ED in adolescent girls, when psychological factors are present. Increases in the WHipr, characteristic of childhood body is negatively associated with that risk.

Keywords