

Increased prevalence of overweight and obesity among Polish children age 14-18 between 2001 and 2013 from Krakow, Poland - a cross-sectional study

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ABSTRACT

Introduction: So far, very little data on pediatric obesity has been published in Poland, although the problem seems to be growing.

Objective: To investigate present prevalence of overweight and obesity among schoolchildren using CDC (Center of Disease Control and Prevention) criteria in Krakow and to compare how it has changed between the years 2001 and 2013. Our aim was to establish the magnitude of this rising problem within the last decade.

Materials and methods: The study was conducted in two phases. In 2001, height and weight of the group of schoolchildren were obtained. Twelve years later, children in the same age, attending the same schools, were measured and weighed. Using the collected data, BMI (kg/m²) was calculated in order to acquire BMI percentile. BMI cutoffs referential for Polish population were used.

Results: Using the CDC criteria to diagnose children

as obese or overweight, the authors determined that the prevalence of overweight, including obesity was 10.8% in 2001 and changed to 15.1% in 2013 (p=0.0054). The percentage of obese children increased from 2.0% to 4.8% (p=0.0012). The occurrence of overweight and obesity has increased among girls (p=0.0025; p=0.0112 respectively) while among the group of boys, it did not change. The factors associated with excess weight were: male sex (OR=1.48; 95%CI=1.13-1.95) and second phase of the study (OR= 1.48; 95%CI=1.13-1.95).

Conclusion: Our study indicated that the prevalence of obesity and overweight among adolescents in Krakow rose within the last decade. The rising problem affected females more than males. Despite that, excess weight is still more frequent among males than females.

Key words: pediatric obesity, adiposity, overweight