PREVALENCE OF OBESITY AMONG SCHOOLCHILDREN IN ST. PETERSBURG

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Introduction The upward steady trend in the prevalence of obesity in the pediatric population during the last decades is a significant medical and social problem.

Objectives To study the prevalence of obesity among schoolchildren in St. Petersburg.

Methods Totally 6449 schoolchildren aged 6–17 years old had been enrolled in the cross-sectional study with the use of random sampling techniques. All investigated children were subdivided into 4 subgroup: I - 946 children 6–7 years old; II - 2092 children aged 8–11 years; III - 2925 children aged 12–15 years; IV - 486 children aged 16–17 years old. We measured the length and weight of the body, waist circumference (WC), calculated body mass index (BMI). We diagnosed obesity if BMI value was above 95 percentile in accordance with the standards centile scale ‘WHO Growth Reference 2007’. A visceral obesity was diagnosed when the WC exceeded more than 90 percentile according to the scale proposed by International Diabetes Federation (2007). Data was analyzed using the statistical package «STATISTICA v.7.0 ».

Results Obesity was diagnosed in 13.8% of schoolchildren. We have identified the following relationships between age, gender, and obesity. According to the gender, obesity was found to be more common among boys (15.8%) than girls (11.5%); p < 0.001. The difference is statistically significant in the I (p < 0.001), II (p < 0.001) and IV (p = 0.01) groups. In the third age group, the number of boys and girls with obesity was equal.

According to the age, boys with obesity in IV gr. were less than in I gr. (16.8%); p = 0.004), II gr. (17.4%); p = 0.001) and in III gr. (15.6%); p = 0.007). Similarly, obese girls in IV gr. were less (3.6%) than in I gr. (9.3%); p = 0.004), in II gr. (9.5%); p = 0.002) and especially in III gr. (15.1%); p < 0.001). The largest number of obese girls were detected in III group, compare to II and I groups (p < 0.001).

Waist circumference exceeding 90 percentile are defined in 2.7% of schoolchildren. The number of boys was greater (3.7%) than girls (1.7%); p = 0.009).

Conclusion In obese adolescents, disordered eating attitudes and behaviors could be associated with anxiety and depressive symptoms. Thus, all adolescents with obesity should be screened for their eating attitudes and behaviors and also for their emotional health.