

The incidence of physical deficiencies among 11-12 year old children, in relation with the body weight category

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Abstract

Background. This paper is part of a larger study on growth parameters and *physical development of school age children*. In this study we investigated whether there is a link between body weight and the incidence of child physical deficiencies of the spine and lower limbs.

Aims. The incidence of physical deficiencies among 11-12 year old children, in Cluj-Napoca, in relation with body weight was studied.

Methods. 149 children were evaluated. The subjects' age was 11-12 years. For physical deficiency assessment we used the plummet and the digital method. The body-mass-index-for-age-and-sex percentile was assessed. Statistical processing was performed with the Excel application (Microsoft Office 2007) and the OpenEpi 3.01 X application. The graphical representation of the results used the Excel application (Microsoft Office 2007).

Results. In the obese group, a statistically significant association between the physical deficiencies incidence and the weight category ($p=0.011$) was observed. In the obese group, there was observed a statistically highly significant association between the lower limb deficiency incidence and the weight category ($p=0.001$). In the underweight group, there was observed a statistically significant association between lower limb deficiency incidence and the weight category ($p=0.0236$).

Conclusions. In obese children, the incidence of physical deficiencies is significantly higher compared to healthy weight children. In obese children, lower limb deficiency incidence is very significantly higher compared to healthy weight children.

In obese children, spine deficiency incidence is not significantly higher compared to healthy weight children. In underweight children, lower limb deficiency incidence is significantly higher compared to healthy weight children.

Key words: children, physical deficiencies, body mass index.