PHYSICAL DEVELOPMENT AND BODY PROPORTIONALITY OF CHILDREN AND ADOLESCENTS IN RELATION TO SOCIO-ECONOMIC LEVEL OF FAMILY

Ševčíková L1, Nováková J1, Hamade J2, Štefaniková Z1, Jurkovičová J1, Sobotová L1, Ághová L1

1 Institute of Hygiene, Faculty of Medicine, Comenius University, Bratislava, Slovak Republic
2 Public Health Authority of Slovak Republic, Bratislava, Slovak Republic

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Objective: The life conditions are closely linked to social position of a family and its impact on physical development of children and adolescents. The purpose of the study has been to evaluate the growth and body proportionality of children and adolescents in relation to parent education and occupation.

Material and methods: Parameters of height, weight and body mass index have been analyzed on the basis of the 6th Slovak nation-wide cross-sectional anthropometric survey (2001), which was realized on representative samples (17,800 boys and 17,400 girls) from all ages (0–18 years). The overweight has been evaluated as BMI over 90 and 97th percentile for age. Informations on education and occupation of parents was obtained employing a questionnaire. The programs EPI info and S Plus 6.0 were used for analysis.

Results: The null associations between parental education and height, weight and BMI in 0–6-year-old children have been detected, but in 7–18-year-old children and adolescents these associations have been revealed to be significantly positive. Negative relationships between incidence of overweight and obesity and an educational level of mother was detected (p < 0.001) particularly in girls. Although family social level is related to children overweight, the associations vary according to age and gender. The different physical activity of boys and girls could be the reason. The trend of the body proportionality does not follow the growth acceleration in boys and girls during the last decade.

Conclusions: Health education concentrated on family and systematic preventive health care during childhood and adolescence should belong to fundamental aspects of health policy in our country.