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Original paper

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Prevalence of Obesity of Primary School Age Children

Extended summary

The aim of this study was to determine prevalence of obesity of children of primary school age from several randomly chosen primary schools in Belgrade, and to suggest preventive measures, which can be done, primarily during children's stay at school. The study points at the real need for creating programmed physical activities of students within the classes of Physical education. This is done with hope to provoke some activities of relevant institutions – from some Ministries, Faculty of Sport and Pre School and Primary School institutions..

Application of least general, and individual programmes which school could offer, will enable urgent prophylactic therapy – change of life style.

In our country, there is an insufficient number of the research of these issues, so they need to be actualized. There are not clear national standards of growth and development of children, and this additionally makes the problem of monitoring more difficult. Struggle against obesity should be an inseparable part first of basic educational and pedagogical work which is very important in the process of development and identity of a child. Knowledge about the frequency of health problem at the level of children's population, which is particularly a vulnerable group, enables further evaluation of undertaken preventive measures and better control of illness. The research has been conceptualized and performed as the epidemiological section study.

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The research was realized in December 2013. Measuring morphological characteristics of children were done in standardized procedures. One of the most innovative ways of estimation and analysis of the body contents was used in realization (*Body-impedance system*), by using analysators of impendence. Laser anthrop meter of high precision was used in realization of estimation of longitude dimension. Results were stated with suitable standards according to age, which were taken form world most prestigious organizations, which deal with actual issues of children (WHO – *World Health Organisation*, NCHS - *National Centre for Health Statistics in collaboration with the National Centre for Chronic Disease Prevention and Health Promotion ECOG-European Childhood Obesity Group*). Comparing results of this research with results of similar research in the world, it can be assumed that children of primary school age in Belgrade are in greater percent overweight and obese in comparison to their peers in other parts of Serbia, an developed countries, particularly Europe and USA.

Measurement results were processed by standard descriptive statistics (average, minimal and maximal values and standard deviations) with the aid of statistical programme SPSS/20. Calculating percentage values results was done by special applicative software. Results gained in this study differ in some variables, whereas in other variables they are complement with the results gained in different studies, so that special differences in values of the measured variables in comparison the common ones cannot be observed. Nevertheless, it is a warning sign that shows maximal results of BMI index.

Given results and applied methodology in this research can be the basis for undertaking suitable preventive measures for solving this growing health problem of children. Within the activities at school, it is necessary to urgently start a unique, whole and long-lasting multi-disciplinary programme of this aspect of health protection of school population. This sort of programme should include promotional activities, obtaining prevention, education of different target groups (students, parents, teachers, class teachers, and media), obtaining and giving needed regular diagnostic and therapeutic services for obese children adolescents, and giving significance to Physical education classes.

Key words: obesity, monitoring, student, primary school, teaching Physical education.

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