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## **OCENA POSTAWY CIAŁA I AKTYWNOŚCI FIZYCZNEJ DZIECI W WIEKU SZKOLNYM**

### **Summary**

**Introduction:** Body posture defects cause movement possibilities restriction and body efficiency and functioning decrease. They negatively influence emotional wellbeing and cause decrease of life quality. Causes of body posture defects include birth defects of skeletal, muscular, or nervous system, locomotive organs injuries, developmental diseases, and low physical activity. In contemporary life, physical activity is necessary to maintain health and good physical condition. It plays a fundamental role in proper physical, psychological, and social development. Physical activity is a natural need of every human being, and properly conducted, it helps with proper development.

**Aim of the study:** To assess posture and physical activity of school children. Frequency of body posture defects was assessed according to sex, weight, height, and BMI index of the subjects. Additionally, the severity level of specific body posture defects was assessed, as well as physical activity level of the subjects in relations to their sex, age, weight, height, and BMI index. Moreover, body posture defects occurrence in relations to the level of physical activity was assessed.

**Material and method:** Sample group consisted of 142 students, including 62 girls and 80 boys in ages between 8 to 14 years old. Research was conducted in randomly chosen elementary and secondary schools between May 2016 and December 2016.

The examination procedure was conducted by the same person in each case. Testing scheme was always the same and included the following: interview about birth date, suffered and current diseases, current wellbeing, participation in school and after school activities during a week preceding the examination; weight and height measurement; limbs lateralisation assessment; body posture assessment executed using method of Kasperczyk; physical activity level assessment using executed using Physical Activity Questionnaire for Adolescents.

**Results:** Almost all examined students had postural deformities – 96%, including 54% of boys and 42% of girls. Girls did not differ from boys in terms of general body posture assessment according to Kasperczyk. The average number of points for boys was 5.1, and for

girls amounted to 4.4, which explains more frequent occurrence of deviations from the perfect posture among boys. In this study, most frequently occurring body posture defects were in the position of shoulders 70.4%, shoulder blades 59.2%, head 52.1%, and stomach 47.2%. Increased lumbar lordosis and scoliosis were noted among the same amount 39.4% of children. Knees defects were noted in 25.4% of students, thoracic kyphosis irregularities in 22.5% and feet defects in 16.2%. The least frequent 11.3% were rib cage defects. Research shows that the older children had better body posture.

The average level of physical activity according to Physical Activity Questionnaire of the tested students was 2.62. The students were least active during leisure time 1.21, while they were most active during P.E. classes 4.11. Increase of body posture defects accompanying decrease of physical activity was noted.

**Conclusion:** 1. Body posture defects are common among school children. 2. The most frequent body posture defects are these of shoulders and shoulder blades. 3. Body posture defects were more frequent among boys than girls. 4. Children lead inactive lifestyle and conduct physical activity only occasionally. 5. Physical activity of boys and girls is on a similar level. 6. There is no correlation between general level of physical activity and body posture assessment according to Kasperczyk.