

**PHYSICAL DEVELOPMENT OF PRESCHOOL CHILDREN IN ORGANIZED GROUPS**

Salomova Feruza Ibodullayevna  
Tashkent Medical Academy

**Abstract**

The purpose of the study is to study the physical development and morbidity of preschool children and to conduct a hygienic assessment.

Research materials and methods: 502 children educated in a preschool educational institution underwent a medical examination, and a hygienic assessment of their physical development was performed using the generally accepted method.

Results: The results of a comprehensive assessment of physical development showed that 76% of children had an average level of physical development, 8% had above-average physical development, 2% had high physical development, 8% had below-average physical development, and 6% had very low physical development. 82% of children had harmonious physical development, and up to 28% had certain changes in somatometric indicators. The results of the assessment of children's health indicators showed that 83% of preschool children needed to be healthy.

**Keywords:** Preschool children, physical development.

**Introduction**

The Republic of Uzbekistan is characterized by a high birth rate, traditional large families and a high percentage of children [1]. Due to the functional immaturity of the central nervous system and a number of other organs and systems, high intensity of metabolic processes, the growing body of the child responds to the influence of adverse environmental factors by changing the most important functions: physical and nervous system disorders, mental development, impaired functioning of organs that carry the main functional load to ensure homeostasis, and weakening of natural and acquired immunity [4, 5, 6, 7]. In this regard, the study of physical development and morbidity of preschool children, the assessment of the impact of their upbringing conditions on these indicators, the development and implementation of preventive and health-improving measures to optimize educational conditions are currently an urgent problem [2, 8].

**The purpose of the study is** to study and hygienic assessment of the physical development of preschool children.

**Materials and methods of research:** 502 preschool children educated in preschool educational institution (PSE) No. 588 of Tashkent city were examined. The research program included the study of anthropometric indicators and conducting medical and social research.

**The following anthropometric indicators were studied:** somatometric indicators (standing height, body weight); somatoscopic indicators (condition of the musculoskeletal system: body structure, muscle development, spine, chest, abdomen, legs and heel structure). An anthropometer and medical scales were used to measure somatometric parameters. Physical development of the examined children was assessed using regional assessment tables [3].

**The results obtained and their discussion.** The analysis of physical development indicators of preschool children made it possible to identify some patterns. Namely, age-related dynamics and gender differences were found for somatometric indicators. Body weight in boys increased from 13.0 kg to 22.8 kg, and in girls from 12.6 kg to 22.4 kg. An increase in height was noted from 92.5 cm to 122.7 cm in boys, and from 92.0 cm to 122.2 cm in girls. The greatest annual increase in body length is observed from 3 to 4 years of age (for boys - 8 cm, for girls - 7.8 cm). The maximum annual weight gain was also recorded from 3 to 4 years of age (boys - 2.5, girls - 2.8 kg). When assessing the physical development of preschool children using a comprehensive scheme, it was found that physical development was average in 76% of children, physical development was above average in 8% of children, high in 2%, below average in 8%, and low in 6%.

Physical development of 82% of children was harmonious. In 10% of the children participating in the examination, disharmonious development was manifested by a lack of body weight, in 6% - by an increase in body weight of the 1st degree, and in 2% of cases, high growth was noted. It is known that the physical development of children is supplemented by an examination of the external appearance of the body (data on the development of the skeleton, the shape of the spine, chest, abdomen, feet and heels, the level of muscle development and the subcutaneous fat layer.). The most common pathologies are foot deformities. Among the preschool children we examined, O- and X-shaped foot defects were observed. Thus, it was determined that 7.3% of preschool children had O-shaped feet, and 2.4% had X-shaped feet. 28% of the examined children had posture disorders, including scoliosis (17%), hunchback (3.6%), hyperextension (4.4%), kyphosis (1.5%) and lordotic posture (1.5%). Flat feet were detected in 10% of the examined children.

Abnormal chest shapes were noted in 4% of cases, including "chicken" chest in 1.5%; "bootleg" chest in 1% of cases, and deformed chest shapes in 0.5% of cases. Among the examined children, flat feet, growth disorders, and abnormal chest shapes were simultaneously detected in approximately 7% of children. Thus, the majority of preschool children (76%) have an average level of physical development. At the same time, the physical development of 82% of children was assessed as "harmonious". 28% of children have certain changes in somatoscopic indicators.

### Conclusions:

A comprehensive assessment of the physical development of preschool children (3-7 years old) showed that 76% of children have an average level of physical development, 8% have above-average physical development, 2% have high physical development, 8% have below-average physical development, and 6% have very low physical development.

82% of children have harmonious physical development, and up to 28% have certain changes in somatometric indicators.

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