PHYSIOLOGICAL ASPECTS OF ASSESSING THE PHYSICAL DEVELOPMENT AND HEALTH OF PRESCHOOL CHILDREN

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Annotation: This article is devoted to the study of the physiological aspects of assessing the physical development and health of preschool children. The health and development of the child during this period has a significant impact on future mental and physical potential. The article analyzes such indicators as body length and weight, development of the muscular and skeletal systems, and healthy state. It also considers modern assessment methods and measures that help maintain and develop children's health. The article is based on scientific sources on this topic and contains practical and theoretical recommendations in the field.

Key words: Preschool children, physical development, health assessment, physiological changes, immune system, skeletal and muscular system, central nervous system, body mass index (BMI), nutrition, healthy lifestyle

Preschool children experience the most important developmental periods of life. During this period, not only physical, but also psychological and social development takes place actively. At this stage, supporting the child's health and monitoring its development is important not only for parents, but also for pedagogues and medical specialists. (1,6) Analyzing the physiological development of children allows us to identify factors affecting their health, solve problems at an early stage, and ensure a high-quality lifestyle in the future.

The development of children of preschool age directly affects their future mental and physical potential. Therefore, the issue of assessing physiological processes at this age and creating optimal conditions for healthy development is relevant. (13) Also, important processes in the development of preschool children

are associated with the maturation processes of their various physiological systems. For example, the development of the skeletal system, muscle strengthening, the formation of immunity, and the improvement of the central nervous system occur at the most active stage during this period. (18,20) These aspects create the foundation for children's daily life activities and future high performance.

This article is aimed at in-depth study and analysis of physiological processes affecting the physical development of preschool children. The article also analyzes 20 modern studies conducted in this area and reveals their practical significance. (17,4)This approach is especially important in taking into account the individual characteristics of children and developing programs adapted to them. This article highlights the importance of a scientific approach in ensuring children's health.

Features of physical development of preschool children

The body of preschool children undergoes rapid development and transformation processes. During this period, the following main physiological changes are observed(4,10):

1. Height and weight gain: Children can grow an average of 6-8 cm in height and 2-3 kg in weight per year. (12)

2. Muscular system development: Muscle strength and endurance increase, but are not yet fully developed.

3. Skeletal system growth: Bone mineralization continues, bone elasticity is high.

4. Central nervous system development: Coordination of movements and motor skills develop. (3)

Physiological aspects of health assessment

Children's health is assessed based on their physical development indicators. The following are the main criteria (15,2):

1. Body length and weight: Compared with average indicators for age and sex. (5,8)

2. Body mass index (BMI): The ratio of a child's body weight to height determines obesity or underweight.

3. Immune system status: Frequent cases of illness are observed. (9)

4. Cardiovascular system: Indicators such as heart rate and blood pressure are measured.

5. Digestive system: Food digestion and nutritional status are analyzed.

Assessment methods

The main methods used to study the physical development of children are as follows:

1. Anthropometric measurements: Indicators such as height, weight, head circumference, and chest volume are measured.

2. Functional tests: Movement coordination and endurance tests are performed.

3. Laboratory tests: The general condition of the body is determined through blood and urine tests. (15.3)

4. Instrumental examinations: Electrocardiogram (ECG) and ultrasound examinations are performed.

5. Psychological tests: The level of cognitive and social development of children is assessed.

6. Online programs and applications: Modern technologies are used to monitor children's development and analyze the results. (16.11)

In conclusion, the development and health of preschool children lay the foundation for their future healthy lives. Children's health can be improved through regular assessment of physiological changes, individual care, and support for a healthy lifestyle. These studies show that the health and development of children depend on their nutrition, physical activity, and environmental factors. The use of modern

methods in monitoring preschool children, the implementation of health programs, and close cooperation with parents will yield positive results in this area.

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