



PRESCHOOL CHILDREN'S HEALTH AND RISK FACTORS THAT AFFECT HEALTH

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Abstract

The health of children and adolescents is an integral component of the wealth of the nation and the most striking indicator of its well-being. Preschool age is a kind of key phase of the life cycle, when in the course of development, the body turns out to be the earliest and easily damaged. Taking care of healthy and potentially healthy children today should be the main content of daily practical activities. Parents of children should understand the importance of preschool age in the formation of health.

Keywords: health of preschool children, factors affecting the health of children.

Introduction

The health of children and adolescents in the Republic of Uzbekistan is one of the priority areas of medical science and practice. The Resolution pays great attention to the further improvement of the preschool education system as the most important link of the unified system of continuing education, expanding the network and strengthening the material and technical base of preschool educational institutions, providing them with qualified teaching staff, introducing modern educational programs and technologies into the educational process that provide comprehensive intellectual, spiritual, aesthetic and physical development of children, radically improving their level of preparation for school [17].

It is at preschool age that the foundations of health are laid. The period of growth and development of a child refers to the most important period that determines the state of human health throughout the rest of life [1,14,24]. Preschool education of children is an important stage in the formation and preservation of health in the future [24].

However, the characteristic of children's health has a number of its own characteristics. According to Yu.E. Veltischev, a child's health is, first and foremost, the optimal level of development achieved - physical, neuropsychic and intellectual, its correspondence to chronological age, and both slowing down and accelerating development requires increased attention of a doctor. The second criterion is sufficient functional and social adaptation of the child, a wide range of adaptive reactions, tolerance towards permissible loads, adequate behavior in the family and society. The third criterion is a high degree of resistance to adverse effects, first of all, optimal immunobiological reactivity and rapid



overcoming of stress reactions. The fourth criterion is the absence of borderline states and signs of chronic diseases. That is, the child's health should be considered as a state of vital activity corresponding to the biological age, which is in unity with physical and intellectual characteristics due to genetic and environmental factors and emerging adaptive reactions during the child's growth [6]. Many foreign pediatricians recommend including indices or development coefficients in the child's health indicators: the coefficient of intellectual development (IQ), the coefficient of general development, characteristics of the emotional sphere, etc. [9].

The state of health can be objectively determined only by the combination of many parameters: anthropometric, clinical, functional, physiological and biochemical, determined taking into account gender and age factors, as well as social, clinical, geographical and meteorological conditions [6,9]. Without in-depth knowledge of the characteristic features, both biological and psychophysiological, as well as social, the health status of young children cannot be assessed.

Biological features include: the level of physical maturity of the child; immaturity, both morphological and functional, of all organs and systems of the child at the time of birth; extremely rapid rate of development in the first periods of life, causing a very high vulnerability and plasticity of the child's body. Therefore, children of this age are easily affected by both positive and negative environmental influences [6]. To determine the health status of young children brought up in a family, in a preschool institution, during the adaptation period, it is necessary to take into account the incompleteness of the development of the child's body, reflecting at each age stage specific physiological maturity of organs and systems; rapid growth and development that determines the dynamics of the age of maturity; heterochrony in the development of organs and systems contributing to functional deviation is directly proportional to the influence of adverse factors of external and internal environment; close dependence of the formation of health of children of early age from the course of the perinatal period of ontogenesis and genealogical factors; influence factors and environmental changes conditions of life and education [6].

According to WHO, among the variety of factors shaping the health of children, four main groups can be identified with an indication of their specific priority: lifestyle (50%), heredity (15-20%), environment (20%) and organization of health care (10%) [6,9,12,13]. Therefore, in order to preserve and strengthen the health of children and the entire population, it is necessary to pay special attention to the most basic factor – lifestyle [12,13]. Several studies have shown that there is a link between lifestyle and health. Today lifestyle changes are seen as an important decision strategy chronic health problems [23]. A hygienically complete external environment, along with other factors, is an important prerequisite for preserving and strengthening the health and development of children [1]. In this regard, the conditions of education and upbringing of children in organized collectives, in which most of the children are in this period, are of great importance [1,3]. The degree of usefulness of the learning conditions is largely determined by the improvement and sanitary condition of children's institutions [1]. In the last decade, there has been a lot of a pleasant trend in changing the health status of the child population, which is largely due to the unsatisfactory state of the external environment [2,8,25,26], underestimation of the role of family and hereditary factors, as well as insufficient provision of



children's medical and preventive institutions. Thus, deviations in the state of health are noted in every fourth preschooler and the frequency of group III health is more than 6.7% [2,4,6,8,13,20]. The state of health of modern preschool children is of particular concern due to the increase in pathological changes [20,24].

In recent years, increasingly published data on the deterioration of the health of the child population, manifested by an increase in the absolute and relative number of children suffering from chronic diseases-patients who are often and for a long time ill, have deviations in physical and mental development [1]. A feature of the modern pathology of children and adolescents is an increase in the frequency of morphofunctional abnormalities, an increase in the transition of acute forms of diseases to chronic, as well as an increase in primary chronic pathology [19]. The level of primary and general morbidity of children and adolescents is increasing. It should be noted that the indicators of both primary and general morbidity in children aged 0-14 years are significantly higher than those in adolescents aged 15-17 years [10].

In the structure of the primary morbidity of children and adolescents, the leading ranks (excluding respiratory diseases) are occupied by injuries and poisoning, diseases of the skin and digestive organs, and in the general morbidity of children – diseases of the digestive organs, eyes and skin [10]. Of 7.6 million deaths in children younger than 5 years in 2010, 64.0% (4.879 million) were attributable to infectious causes. In older children, pneumonia (14.1%; 1.071 million, 0.977-1.176), diarrhoea (9.9%; 0.751 million, 0.538-1.031), and malaria (7.4%; 0.564 million, 0.432-0.709) claimed the most lives [27].

In children aged 0-14 years, there is a significant increase in diseases associated with behavioral risk factors: the consequences of pregnancy and childbirth, respiratory diseases, injuries and poisoning, diseases of the genitourinary system, etc. [10].

According to some researchers, in the structure of the overall morbidity of children, respiratory diseases are in 1st place (40%), in adolescents - diseases of the endocrine system (9.4%); in 2nd place in children - diseases of the endocrine system and eating disorders (10%), in adolescents - respiratory diseases (17%); in third place, respectively, infectious and parasitic diseases (9%) and digestive diseases (8%) [1,15].

Based on the results of medical and psychopedagogical examinations of children conducted by the Child Examination Centers of Uzbekistan, it is concluded that only 22.7% of children from 0 to 14 years old can be considered healthy [22].

It is noted that in children who are often ill, unlike children who are occasionally ill, deviations from the norm of the functional state of the body are much more common. Frequent diseases of children are risk factors for impaired harmonic development [1].

A comprehensive assessment of the state of health is based on 4 basic criteria: the presence or absence of a functional disorder and /or chronic disease (taking into account the clinical variant and the phase of the pathological process; the level of functional state of the main body systems; the degree of resistance of the body to adverse external influences; the level of development achieved and the degree of its harmony [1].



Group I - healthy children with normal physical and mental development, without anatomical defects, functional and mor group II – children who have no chronic diseases, but there are some functional and morphofunctional disorders; convalescents, especially those who have suffered severe and moderate infectious diseases; children with a general delay in physical development without endocrine pathology (low growth, lag in the level of biological development); children with a deficiency or excess body weight; children often and / or long-term suffering from acute respiratory diseases; children with physical disabilities, the consequences of injuries or operations with the preservation of the relevant functions; group III - children suffering from chronic diseases in clinical remission with rare exacerbations, with preserved or compensated functional capabilities in the absence of complications of the underlying disease; children with physical disabilities, the consequences of injuries and operations, subject to compensation of the relevant functions; the degree of compensation should not limit the possibility of education or work of a child or teenager; Group IV – children suffering from chronic diseases in the active stage and the stage of unstable clinical remission with frequent exacerbations, with preserved or compensated functional capabilities or incomplete compensation of functional capabilities; with chronic diseases in remission, but with limited functional capabilities; children whose underlying disease requires supportive therapy; children with physical disabilities, the consequences of injuries and operations with incomplete compensation of the corresponding functions, to a certain extent limiting the possibility of training and work of the child; Group V – children suffering from severe chronic diseases with rare clinical remissions, frequent exacerbations, continuously recurrent course, with pronounced decompensation of the functional capabilities of the body, the presence of complications of the underlying disease requiring constant therapy; disabled children; children with physical disabilities, the consequences of injuries and operations with a pronounced violation of compensation the corresponding functions and a significant limitation of the possibility of training and work [21]. One of the most important problems determining the health of children is the organization of their nutrition [5,18].

The WHO Regional Office for Europe estimates that approximately 80% of all diseases are somehow related to nutrition, and 41% are related to the main determinants of nutrition [16]. Properly organized nutrition, complete and balanced in terms of the content of basic nutrients, vitamins and microelements, ensures the normal growth and development of the child's body, has a significant impact on the state of health, the resistance of the child's immunity to various diseases, promotes physical and mental development, increases efficiency and academic performance, creates conditions for the adaptation of the younger generation to environmental factors [11,19]. The role of children's nutrition in modern conditions is significantly increased due to the influence on the growing organism of such social factors as a sharp acceleration of the pace of life, an increase in cognitive information received by children, the intense nature of study, a significant amount of academic load, which is associated with high energy consumption and high intake of nutrients [1,7,11]. In the organization of nutrition, the regime or rhythm of nutrition, the correct distribution of the diet by meals, the environment in which it is taken, etc. are of great importance. According to Russian researchers, every third child does not comply with these requirements, and therefore has low health indicators [1,15].



In recent years, the number of overweight children has been increasing, the study revealed a direct link between maternal and child obesity, as well as the influence of snacking, watching TV and physical inactivity. Children of overweight mothers were 3.34 times more likely to be overweight/ obese than children with mothers of normal weight (95% CI: 1.77- 6.28). Male gender of the children ($p=0.043$) and maternal overweight ($p=0.000$) were positively associated with child overweight/obesity. Physical activity <60 minutes/day ($p=0.014$), screen time >180 minutes/day ($p=0.020$), regular snacking while watching television, using computer/tablet/ mobile phones ($p=0.000$) were associated with overweight/obesity status of the preschool children.

Thus, to assess the state of health, it is necessary to take into account factors affecting the health of children and take into account the physical development and adaptive capabilities of the child. Take into account exogenous and endogenous risk factors that affect the health of preschool children. As well as public health, all efforts should be directed at the formation of a healthy lifestyle in children, while helping parents, especially mothers, to understand the factors that lead to various diseases in children.

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