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Modern aspects of the interaction of medical and pedagogical workers on prevention and detection of disturbances of development and state of health of schoolchildren

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Abstract

A significant impact on the health of children is provided by training in educational institutions, which coincides with a period of intensive growth and development of the child's body. Systematic and long-term exposure to school environment factors accumulates and leads to various health disorders. The degree of influence of school factors also depends on the initial state of health of the child. The development and intensification of school education has exacerbated the problem of maintaining the health of students. Among children who begin regular education, the prevalence of borderline health disorders increases with the formation of chronic pathology in the future, therefore, the search for methods of early prenosological diagnosis and prevention of diseases is especially relevant. In this regard, the World Health Organization defines one of the priority areas to support the health, safety and well-being of children and adolescents. Quality standards have been developed for school health services, which should ensure the improvement of the health of young people in all educational institutions. Despite the recognition that the tasks of preserving and strengthening the health of modern schoolchildren can and should be solved directly in an educational institution, universal and effective forms of organizing the educational process have not yet been found, the issue of optimizing motor activity and nutrition of students has not been resolved. Actual development of new conceptual provisions for the organization of prevention using a systematic approach, changing the role of the doctor as the organizer of school health care and evidence-based integration of the teacher into the system for preventing developmental disorders and the health status of school-age children.

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Introduction

It is known that the health of children is closely connected with the organization of medical care for children and, first of all, with outpatient service. This is where 80% of the population starts and finishes their treatment, and where all preventive and rehabilitation work is concentrated. At the beginning of the 80s of the last century, a movement for primary medical and social care began in the world, which was mainly aimed at observing the principles of social justice and improving access to medical care. Part of this movement included maternal and child health programs. And in the early 1990s, the "district model" of health care began to be actively introduced: the main place in this system was occupied by the "medical and sanitary center", performing the equivalent functions of a family doctor or general practitioner. From the point of view of many health professionals, this mechanism was the only one that adequately responded to the population's demand for health care services. The second part of this system was hospitals providing secondary health care. However, due to insufficient funding, such a healthcare system was introduced only in some countries, and by the 2000s it became clear that it had no alternatives in terms of real comprehensive care, including for the child population (1,2).

About the financial burden

At a time when the health sector was underfunded to deal with urgent problems in the healthcare system, attention was turned to "vertical" single-purpose programs. The most notable illustration is the United Nations Children's Fund (UNICEF) initiative "Child Survival Revolution", which included activities, including those aimed at monitoring child growth, immunization, and prevention of acute respiratory diseases (3). In the period from 2006 to 2015 in the United States, an additional \$52.4 billion was spent for these purposes. The World Health Report (2013) found that the pursuit of universal health coverage is a powerful vehicle for improving health and well-being and for further human development. One of the shortcomings of medical care in the world is the misappropriation of funds, when the allocated resources are concentrated around expensive medical services and at the same time the potential opportunities for primary prevention and promotion of a healthy lifestyle are ignored, which can reduce the incidence by almost 70% through prevention (4,5).

One of the goals of primary health care reform is to make health care efficient, consistent and thoughtful in solving patient problems, continuous, effective

when it comes to managing chronic diseases, caring for reproductive and mental health, and ensuring the healthy growth of children. The primary care team must expand their portfolio of care by developing interventions and programs to improve performance that they might otherwise neglect. This leads to the need to invest in prevention and wellness activities, as well as the coverage of areas that are usually neglected, such as health care at school (6–8). Analysis of the situation in the world showed that in order to solve the world's health problems, scientific research is needed that could answer the questions: how to choose the types of medical care that are needed in each case, how to improve service coverage and financial guarantees and, therefore, how to protect and improve health and well-being. Ultimately, there is a need to ensure that all people have access to the health care they need, including prevention, health promotion, treatment, rehabilitation and palliative care services, without the risk of being ruined or impoverished now and in the future (9,10).

Organization

Given the existing problems in the organization of medical care to the population, the World Health Organization (WHO) continues to search for the most effective ways to organize it (9). The new medical and social needs of children and families dictate the need to optimize the organizational forms of activity of the primary level of the pediatric service. In addition to the traditional forms of preventive work, the local pediatrician is assigned a number of fairly new tasks (creating medical and social care rooms - prevention and early detection of psychoactive substance use, hygiene and sexual education, orientation towards a healthy lifestyle, preparation for family life, preservation of reproductive health) (3,10). According to the author, Orel V.I. (2018), it is necessary to develop special programs for the preservation of health in the workplace for young people. It is known that the health of children is closely connected with the organization of medical care for children and, first of all, with the outpatient service. This is where 80% of the population start and finish their treatment, and where all preventive and rehabilitation work is concentrated. At the beginning of the 80s of the last century, a movement for primary medical and social care began in the world, which was mainly aimed at observing the principles of social justice and improving access to medical care. Part of this movement included maternal and child health programs. And in the early 1990s, the "district model" of health care began to be actively introduced: the main place in this system was occupied by the "medical and sanitary center",

performing the equivalent functions of a family doctor or general practitioner. From the point of view of many health professionals, this mechanism was the only one that adequately responded to the population's demand for health care services. The second part of this system was hospitals providing secondary health care. However, due to insufficient funding, such a healthcare system was introduced only in some countries, and by the 2000s it became clear that it had no alternatives in terms of real comprehensive care, including for the child population (1,2). At a time when the health sector was underfunded to deal with urgent problems in the health care system, attention was turned to "vertical" single-purpose programs. The most notable illustration is the United Nations Children's Fund (UNICEF) initiative "Child Survival Revolution", which included activities, including those aimed at monitoring child growth, immunization and prevention of acute respiratory diseases (3). In the period from 2006 to 2015 in the United States, an additional \$52.4 billion was spent for these purposes. The World Health Report (2013) found that the pursuit of universal health coverage is a powerful vehicle for improving health and well-being and for further human development. One of the shortcomings of medical care in the world is the misappropriation of funds, when the allocated resources are concentrated around expensive medical services and at the same time the potential opportunities for primary prevention and promotion of a healthy lifestyle are ignored, which can reduce the incidence by almost 70% through prevention (4,5).

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The modern school is gradually shifting its attention to the health problems of students, trying to implement health-saving activities into various forms, which is reflected in numerous scientific studies. And today

there are several areas of such work in schools: the organization of the fifth health-improving quarter, active physical culture and health-improving activity, education of a healthy lifestyle and providing a special sanitary and hygienic regime of the educational process and specific conditions for restoring health potential (sanatorium schools). The intensification of the educational process is an urgent need of modern education, aimed at finding new pedagogical techniques that can increase cognitive activity, motivation for learning, independence, the possibility of accelerated assimilation, the formation and development of knowledge, skills and abilities (13). Modern relations between education and health in the minds of most parents, doctors, teachers, either as alternative (either good education or health), at best as additional (good education and preserved health) (13). In fact, the preservation of health, its formation is possible if health is considered as a pedagogical category. It is necessary to set and solve in education not so much the task of saving health as the task of building health, that is, the formation and preservation of the health of children in their daily educational and educational life (14). There is an opinion of scientists that teachers are not quite ready for innovative activities within the framework of a new concept of education, the success of which depends on the human resource. It is necessary to develop professional development of school leaders and teachers in changing the style of their thinking, stimulating professional activity, displaying creativity in teaching activities and preparing teachers for innovative activities (14). In particular, the problem of unpreparedness for innovative activities and for the implementation of the task of preserving the health of schoolchildren in the learning process can be associated with the professional culture of the teacher, that is, with the experience of professional activity (12-14).

Therefore, for the successful implementation of the principles of health saving in the PA, certain changes in the stereotypes of the professional experience of teachers and the emergence of a need to implement the principles of health-saving pedagogy are necessary. In order to organize health-saving activities in public organizations, it is necessary to design a new content for professional medical and vocational-pedagogical education to provide staff. One of the options may be medical and pedagogical education based on the integration of medical, psychological, pedagogical and other knowledge, that is, the training of a teacher - a valeologist (13).

The professional training of such a specialist should be carried out taking into account the principle that

health protection is a regulator of professional and educational activities, including a set of conditions that make up and ensure the educational process from the standpoint of maintaining the health of its subjects, and is integrated and differentiated due to its social orientation (14). It should be borne in mind that valeology sets as its main task not the treatment of patients, but the preservation of the normal state of individual systems and the body as a whole in psychophysiological terms (15). Taking into account the fact that at present only 10-15% of school students can be considered healthy, the rest have functional abnormalities or chronic diseases, it is advisable to develop valeological programs, organize and operate the valeological monitoring system with medical specialists involved in protecting the health of children and adolescents (7). Difficulties in organizing health-saving activities in OOs may be due to the fact that a significant part of teachers carry out professional activities in a state of tension of adaptive mechanisms or their breakdown, many of them do not single out health as a priority personal value, do not know the methods of self-diagnosis and self-regulation of states, do not possess a system of knowledge about health, a set of skills and technologies for maintaining the health of the student and his own health (11,16).

A survey of teachers showed that they do not have a scientifically based understanding of the essence of a healthy lifestyle, they do not make their health dependent on physical education, hardening, outdoor recreation, which indicates a lack of health culture of the teachers themselves (16). It follows that the transformation of the educational process in the direction of building the health of students entails additional requirements for the teaching staff. Given that the attitude towards the health of the subjects of the pedagogical process is of great importance, the preparation of the teacher's personality for health-saving activities should begin at the stage of a pedagogical university. And this should be a multifaceted process aimed at the formation of a value attitude to one's own health and the health of the student, awareness of personal responsibility for the health of the student. In the existing system of professional retraining and advanced training, it is necessary for educators to change the training standards with a focus on health-saving technologies, the need to reduce pedagogical factors affecting the health of schoolchildren (17). Many researchers single out and emphasize the openness of the educational system (12), in which there is a constant exchange of information not only between the managing and managed subsystems, but also with the surrounding social environment, for which it is only a small subsystem.

Therefore, from the point of view of the openness of the educational organization, the interaction between the school and the family in shaping the health of students is important, which should have a synergistic and coherent character: two urgent problems - the problem of attracting parents to cooperate with the school, overcoming confrontation and contradictions between them and the problem of mass preventive and psycho-corrective work become interconnected and interdependent (17,18). A general education school, as part of a micro-society, is the most favorable place for influencing the process of forming the somatic and mental health of children and adolescents, this becomes possible due to the introduction and integration of prevention and health improvement programs into the educational process as a result of the joint activities of the school administration, medical staff teachers with the involvement of students and their parents. Thus, the analysis of diverse literature showed that not all aspects of children's adaptation to the process of regular schooling have been studied.

Conclusions

There are conflicting data on the state of health and physical development of children of different school ages, due to regional characteristics, standards and research methods. The indicators of the state of health and physical development of schoolchildren, as well as the factors influencing their formation, require a detailed study. To date, no modern systematization of school-related deviations in health status has been proposed. Provisions for the effective interaction of medical and pedagogical workers on the prevention and detection of developmental disorders and health status have not been developed.

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