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Health of Students of Medical Universities of Russia: Problems and Ways of Their Solutions.

Esaulenko IE*, Popov VI, and Petrova TN.

N.N. Burdenko Voronezh State Medical University, 10 Studencheskaia Str.,Voronezh, 394036, Russian Federation

ABSTRACT

The article presents data on the state of health of modern youth and organizational forms of providing medical and preventive care to students of medical universities in Russia. General characteristics of the state of health and activities of students on its maintenance, sources of information on a healthy lifestyle are given. The subjective factors of the formation of health and a healthy lifestyle are considered: the diet regime, physical culture and sports activities, students leisure, the presence or absence of bad habits. The results of many years of work on the use of both general theoretical and methodological approaches and practical mechanisms for organizing and managing health-saving activities in the system of higher medical education are summarized. The main shortcomings in the provision of medical care to this contingent of persons have been identified. Key points in optimization of preventive and rehabilitation aid to students of higher educational institutions are singled out. The solution of the problem requires a new approach to guarantee the provision of student youth with quality medical care, search for innovative forms of its organization, the development of a model of student health management unified for all universities.

Keywords: health, medical, preventive care.

Corresponding author

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INTRODUCTION

In recent years, the main health and demographic indicators of youth health in the last decade have unfavorable trends. The decrease in the number of absolutely healthy students, the growth of chronic diseases in all age groups, the change in the structure of chronic pathology, the abundance and dynamics of risk factors negatively affecting the health status of young people. The expected demographic shifts set stringent requirements for future trends in the development of the labor market. At the same time, the demographic curve coincides with the medium-term forecast of the number of full-time students in state (municipal) institutions of higher professional education of the Russian Federation. The Russian Federation has an advanced network of higher education institutions (over 1000), with more than 5.9 million students. However, in the last decade there has been a rapid decrease in this contingent on average by 10-16%.

Studies carried out by the Scientific Research Institute of Hygiene and Health of Children of the Russian Federation showed that only 10 percent of graduates of general education institutions can be classified as healthy. Out of 13.4 million school-age children, more than half - 53% - have weakened health, and two-thirds of children aged 14 years have chronic diseases. Critical is the fact that the number of children who are not ready for systematic education already exceeds 32 percent today. And this figure is growing steadily! And it concerns absolutely all regions of our country. And in the near future this is the contingent, which, amid the extremely alarming demographic situation, will join the ranks of the entrants, and in the future will form a student environment.

At present, in 28% of cases there is a discrepancy between the results of the medical examination of first-year students and the conclusion of the medical commission in the certificate. The results of medical examinations of first-year students revealed that the real prevalence of functional deviations is 2 times higher than the official statistics. With a sense of vexation, we are forced to admit that to date, there is a problem of formal filling in of typical medical certificates, which does not allow to assess the initial state of health of entrants. All this to a certain extent complicates the work of the selection committee for professional selection of entrants. It is also alarming that the improper registration of certificate forms is growing from year to year. If in 2000 they amounted to 58.0%, 2010. - 60,0%, then in 2016 - already 69.0%, which indicates the complete irresponsibility, negligence and impunity of specialists in completing this legal document.

The diverse aspects of the health of students at various educational institutions have been and remain the subject of close study. However, despite the appearance in recent years of numerous studies devoted to the problem being analyzed, most of them reflect only the specificity of the regions in which research is conducted. And there are practically no works containing a comprehensive study of trends in the dynamics of health of university students; there are no large-scale studies that combine and evaluate existing experience and achievements in the field of the health of young people, do not take into account the effectiveness of social programs, nor have organizational mechanisms for providing medical and social assistance to students youth.

The aim of the work was to scientifically substantiate the recommendations aimed at preserving and strengthening the health of students of medical universities in Russia on the basis of studying their health, morbidity, quality and lifestyle.

MATERIALS AND METHODS

To solve the set tasks, data on the state of health, morbidity and lifestyle of students of 37 Russian medical schools were collected, processed, analyzed and summarized. The study was conducted on materials for 6 years from 2010 - 2016. In the process of selecting data, both continuous and selective studies were used.

RESULTS AND THEIR DISCUSSION

Analysis of the general and primary incidence of medical students in medical institutions showed that during the analyzed period, a steady increase in the incidence rate was observed for all age categories. So, from 2010 to 2016, the overall incidence of students increased by 37.9%. At the same time, the overall morbidity rate, according to the request, increased 1.6 times. Moreover, as the research results show, there is

a tendency to an increase in the incidence, both in general and in certain types of diseases. Most often students are treated with acute respiratory-viral infections (ARVI), diseases of the digestive system and the genitourinary system.

Every year the number of students and students, classified for health reasons to a special medical group, increases. Over the past five years, increased from 10 to 20-25%, in some universities reaches 40% and, according to forecasts, by 2020. will approach 50% of the total number of students. In the structure of functional disorders, the most specific weight are violations of the organs of vision, digestive system, circulatory system, endocrine and metabolic disorders. It should be noted that 22% of students have an abnormality of eye refraction, however, the appeal to a doctor for this type of disease is the smallest.

In the structure of chronic pathology absolute respiratory diseases are about 18%. On the second place is the disease of the musculoskeletal system, in the third place is the disease of the eye and its adnexa, in the fourth place of illness of the digestive organs - 11.7%, in the fifth place of the nervous system disease - 11.6%, in the sixth place of the endocrine system - 8.8%, in the seventh place of blood disease and hemopoiesis - 7%. In the process of training, the number of people with diseases of the nervous and cardiovascular system is increasing.

The temporal analysis of the overall morbidity showed that, on the one hand, there are the same trends in the dynamics of most health indicators and nosological forms (deterioration of public health in the last 5 years), and on the other hand, relatively high zones of high and low incidence in some universities, which indicates the presence of regional features. Diseases of the lungs for the analyzed period were wavy, but with a tendency to a progressive increase in almost all universities.

The pathology of the musculoskeletal system is 1/5 of the students. The most specific weight in the structure belongs to violations of posture, scoliotic changes in the spine and flat feet. Indicators above the average are: Kemerovo, Far East, Omsk, Nizhny Novgorod, Irkutsk, Rostov, Altai, Orenburg, First Moscow and Ural State Medical Universities.

The increase in eye diseases and its adnexa is associated with a high intensification of the educational process, the introduction of computerization in classrooms, an increase in visual loads, and possibly with an increase in the contingent of students enrolling in a university with pathology of the organ of vision, an increase in this class of young people is noted. Absolute leaders in this group are: Chita State Medical Academy, Kazan, Nizhny Novgorod, Orenburg, Ural, Krasnoyarsk State Medical Universities, and Kyrgyz-Russian Slavic University.

Concentrated reflection of the level and quality of health of the younger generation can be considered an indicator of disability. A greater number of people with a disability among first-year students were noted, and their number increased sharply in a number of universities this year. In particular, this applies to the Ryazan, Kazan, North-Western and Stavropol medical universities.

I want to draw your attention to the fact that the absence of special statistics did not allow us to fully appreciate the true level of health of young people. This is due to a number of reasons. For the main source of study of students' health data on morbidity based on the treatment of medical assistance in treatment and prevention institutions are taken. However, the use of these data has serious drawbacks. First, when referring to the data of students' access to medical care, the possibility of personal study of health within a single medical institution is excluded, since in large cities outpatient care of a patient can be made in different institutions: both at the place of residence and at the place of study. This creates significant difficulties in the collection of medical and statistical information. Secondly, the indicators of students' access to medical care depend on its availability. The further from the medical institutions this population lives, the less turnover, and, consequently, the lower the level of the detected morbidity. Moreover, from true indicators in this case not only the sizes, but also the structure of the revealed morbidity differ. With the existing system of accounting for morbidity, its low levels indicate rather the shortcomings and incompleteness of information support than about the true rates of morbidity. Very often one student gets several outpatient cards in different outpatient clinics, medical institutions in the community, the health center of the school and for this reason the statistics of the incidence of students are not always reliable. In most universities there is no system for recording students' health and morbidity.

At the same time, along with the negative dynamics of morbidity over the last decade, the indicators of the physical development of young people have significantly worsened. In this aspect, the nutrition of students plays an important role. It should be discussed separately, since both quantitative and qualitative deterioration in the diet of young people often leads to the occurrence of diseases of the gastrointestinal tract, cardiovascular and endocrine systems, the musculoskeletal system, as well as oncological diseases. In the list of metabolic diseases provoked by malnutrition, obesity and type 2 diabetes should be especially highlighted, the rates of which have recently become non-infectious epidemics.

Most students do not eat regularly, take food randomly. There are long breaks in food followed by a massive food load in the evening. The reasons for the wrong treatment and balance of nutrition students is a busy training schedule, limited funds, inadequate attention to health, which, as a rule, at this age still does not cause serious disruptions. It turned out that the first place in the volume of daily consumption belongs to grain products, cereals and potatoes. Assessment of nutrition students of the Samara State Medical University showed a low intake of vegetables, fruits, bread and dairy products. The level of added sugar was about 100 g due to confectionery. The share of total fat was 41% of the caloric content of the diet. Significant violations in the ratio of basic nutrients have been revealed in students of Omsk and Nizhny Novgorod medical universities. In addition, according to subjective assessments of students in the Far East, North-West, Tyumen, Bashkir, Irkutsk, South Ural, Samara and Altai medical universities, nutrition during the training period is not rational.

A significant impact on the health of young people is provided by educational activities (its nature, intensity and organization). Incorrectly designed schedule of training sessions contributes to the development of early fatigue, fatigue and overwork. Medical students in this respect occupy a special position, since the educational load in a medical college is on average 2 times higher than that of students, for example, a technical college. In addition, for students of medical schools are also specific factors - significant time costs for moving, which leads to an increase in the duration of the school day, physical and mental load; psychoemotional stress. In the process of learning, the state and experience of patients and their relatives negatively affect the neuro-emotional sphere of students; The process of obtaining information during training is associated with negative associations, for example, pain, trauma, death, etc. As a result, anxiety and fatigue increase, which naturally leads to a decline in academic performance.

Against the background of long-term overwork and accompanying anxiety, addictive behaviors are often formed (in persons with low tolerance of difficulties, which seek to restore psychological comfort, improve mood by escaping from reality). Reducing the overall level of youth culture, including sanitary and hygienic, promotes the spread of self-destructive behaviors, such as smoking, consumption of alcohol, narcotic and psychoactive substances.

Smoking medical students a lot, despite all the measures taken. The fight against smoking is conducted in a student environment on a continuous basis. Legislative acts to combat smoking are taken not only at the state level, but also directly in universities. Internal regulations are aimed at restricting smoking in the premises and close proximity to educational institutions for the sake of maintaining safety and proper sanitation, maintaining health and a culture of life. However, despite a series of orders, the situation has changed little from the root. Every sixth respondent 1-2 times a week smokes 2-3 cigarettes, every seventh smokes almost every day for 3-5 cigarettes. More than half of the students surveyed noted their negative attitude towards smoking tobacco products.

As a response to the need of students to overcome nervousness in everyday life in universities, lecture courses and trainings aimed at reducing the psychoemotional stress of students are being developed. In particular, at the Department of Public Health and Public Health of the Nizhny Novgorod Medical University, a draft of the subject "Fundamentals of a Healthy Lifestyle" for senior students was developed. The program included psychological and medical aspects of a healthy lifestyle, practical exercises on relaxation techniques (gymnastics, self-massage, aromatherapy, music therapy), discussions, games. Classes were held with volunteers. At the beginning and at the end of the course, a questionnaire was conducted among them and students from the control group. According to the results of the study, a conclusion was made about the effectiveness of the course - its listeners "were able to maintain their health and high level of psychological well-being, to increase satisfaction of basic life needs, and to avoid depression and anxiety, including due to financial problems."

Equally important, among the main risk factors for the development of diseases, is the low physical activity of young people. Especially it is significant for student youth, which continuously increases the information flow, knowledge accumulates, mental and nervous overstrain increases. According to our data, 36% of students and 70.9% of students who episodically study physical culture and sports are experiencing physical inactivity. Low physical activity is also noted in students of medical schools in Nizhny Novgorod, Saratov, Kemerovo and Bashkir State Medical University.

Analysis of the features of motivation for physical culture and health studies revealed gender differences. So, for students who noted low physical activity, the factors related to the need for physical improvement were significant: to master motor skills, to improve the plasticity of movement, to improve the physique. At the same time, young men with a low level of physical activity in physical education classes see, first, the possibility of mental rehabilitation; secondly, for them a significant argument is the task of increasing self-confidence and increasing respect for oneself by friends. In 32 out of 37 higher education institutions, employees take part in various kinds and levels of sports competitions, thus giving the trainees a personal example.

Meanwhile, it should be noted that in most universities today all conditions for sports have been created. So: own stadium is available in 11 universities, a pool at 8 universities, a riding school at 3 universities, flat structures in 28 universities, other sports facilities in 34 universities.

Universities encourage and initiate sports activities. The number of extracurricular physical education and sports activities and activities is increasing from year to year. Of course, to list all the activities carried out in this article is simply not possible. In a year they pass more than 200.

Thus, the analysis of the health status of student youth showed that among students there is a general negative dynamics of students' health, which is expressed in the fact that from the first year to the graduating class, the number of students with chronic pathology of certain organs and systems increases substantially. The annual rate of such dynamics, which is influenced by: unpleasant mental states, problems in learning, in relationships with others and the difficulties of an independent solution of emerging problems, on average, the entire contingent of full-time students reaches 10%.

With regard to the conditions and lifestyle of the student, such important problems as: insufficient formation of positive social stereotypes in the educational environment related to such concepts as the value of health, a healthy person, a healthy lifestyle, risks in the sphere of health and life; a very wide prevalence of harmful habits, the main feature of which is individual and mass loyalty to them; weak personal awareness of the state of health, uncritical perception of negative symptoms and health risks, dangerously widespread and further expansion of bad habits and socially caused diseases; insufficient general activity of using the possibilities of creative, developing and collective forms of leisure created in the university and in the local community; manifested in the student environment signs of social disadaptation, the weakening of the value relationship to health, involvement in negative, antisocial connections and types of life activity. Characterizing the lifestyle and health of modern students, it should be noted that in the student environment, satisfaction with one's own health prevails. Each student has a real opportunity to choose the forms of vital activity that are important to him, types of behavior. The analysis of actual materials about the life activity of students testifies to its disorder and chaotic organization. Students pay little attention to such factors as medical activity of the population, general health culture, despite the fact that the latter factor should be very important and significant for young people. The leadership of universities is increasingly paying attention to the problem of strengthening and preserving the health of students.

Proceeding from the above, one of the most important roles in the system of preserving and strengthening the health of students is played by universities, which, in connection with the lack of a unified program for the health of students in Russia, often replace it with various preventive measures. The main drawback of existing prevention programs today is the use of the same type of prevention methods - information activities, various actions, physical culture and sports. And the main problem in the implementation of preventive programs is insufficient attention to the empirical and theoretical basis for the development of preventive programs and the subsequent evaluation of their effectiveness.

Conceptual approaches in the formation, preservation and strengthening of health of students are applied in the Russian system of higher education to maintain and develop the health of students. But there are some problems associated with the introduction of this or that theory. The first of these is the unresolved issue of the correspondence of the described theoretical models to the sociocultural characteristics of Russian youth. The second is the orientation of Russian specialists in the development and implementation of programs for the specificity of the target contingent, that is, the students. The authors of programs tend to take into account the peculiarities of the students most often on an intuitive level. This leads to the lack of specific goals and objectives of the impact and to planning based on available implementation methods. The third is the territorial heterogeneity of Russian students in terms of health-damaging factors. It leads to the difficulty of developing model preventive programs for implementation in all Russian universities.

Domestic models and strategies for strengthening the health of students are characterized by a sufficiently detailed development, both theoretical foundations of this type of social activity, and applied aspects of ensuring its success. However, in terms of practical application of the material presented, a number of problems arise that have not yet found a satisfactory solution. So, for example, the authors of really implemented programs tend to take into account the peculiarities of students as a special social group, but, mainly, on an intuitive level. It is extremely rare to develop a program preceded by a research stage that allows you to define goals and objectives so that it gives the maximum effect in terms of preserving and strengthening the health of students.

Hence most programs are planned, proceeding more likely from available methods of implementation (actions, physical activity, etc.) and in consideration of their overall health effect, and not to achieve a specifically desired result.

CONCLUSION

Thus, medical universities have accumulated extensive experience in implementing health programs and promoting healthy lifestyles. However, they are all scattered and fragmented, narrowly focused, which does not give the desired results.

Analysis of available health and preventive programs developed for students did not allow to evaluate the effectiveness of many of them. All programs and forms of recovery of students in a separate university are represented by the authors as sufficiently effective. However, on the national scale, some of the health-saving efforts, both on the part of educational institutions and health care, have not shown their high effectiveness. All these programs take into account individual health parameters and are not based on an integrated approach, including interdepartmental and intra-sectoral interaction of all participants in the educational process. Until now, unified recommendations for teachers on the problem of the formation of healthy lifestyle and prevention of diseases have not been developed. To date, the joint role of educational and healthcare institutions in addressing health preservation issues among student youth during the training period has not been defined. Modern healthcare is trying separately from the higher school to solve the problems of preserving the health of students, which is fundamentally the wrong decision. Negative processes in society led to a formal approach to the implementation of preventive care for student youth. In this regard, the joint activity of universities is necessary, allowing to conduct a continuous systemic process of forming a culture of health among student youth at the level of the country as a whole. The solution of the problem requires a new approach to guarantee the provision of student youth with quality medical care, search for innovative forms of its organization, the development of a model of student health management unified for all universities.

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