DOI 10.31392/NPU-nc.series15.2022.1(145).01

Abramov S. senior lecturer at the Department of Health and Sports Technologies Shishatska V. senior lecturer at the Department of Health and Sports Technologies National Technical University of Ukraine Igor Sikorsky Kyiv Polytechnic Institute

## INCREASING MOTOR ACTIVITY OF STUDENTS BY MEANS OF PHYSICAL EDUCATION IN HIGHER EDUCATION INSTITUTIONS

The entry of mankind to the third millennium puts before him new guidelines aimed at improving the education system, training of highly qualified specialists. All this requires young people in the process of studying in higher education institutions of high stress mental and physical work. In this regard, an important task of modern pedagogical science is the search for new forms and technologies to strengthen and maintain the health of students in the process of learning in higher education. Preservation and strengthening of youth health, full-fledged personal development, training of competent specialists are an integral part of the modern educational process in higher education.

It is important to note that the specifics of teaching in higher education institutions of pedagogical profile are insufficiently studied. It should be noted that most of the works were of a declaratory nature, in particular, the problems of prospects of different types of physical activity, including specific physical exercises to study rational modes of motor activity of students of certain profiles of higher education. Methodological aspects of providing independent classes were studied in parallel, outside the context of the content of physical activity and its regional features, which have an impact on the formation of motivation for student participation in physical culture and sports and health work. The analysis of the scientific literature shows that the existing methods of organizing physical education in higher education institutions are not effective enough to increase the level of physical activity, physical fitness, interest of a significant number of students in physical exercises.

Key words: physical activity students, physical education, physical fitness, institutions of higher education.

Абрамов С. А., Шишацька В. І. Підвищення рухової активності студентів засобами фізичного виховання у закладах вищої освіти. Вступ людства до третього тисячоліття ставить перед ним нові орієнтири, спрямовані на удосконалення системи освіти, підготовки висококваліфікованих спеціалістів. Все це вимагає від молодих людей у процесі навчання у закладах вищої освіти високої напруги розумової та фізичної праці. У зв'язку з цим важливим завданням сучасної педагогічної науки стає пошук нових форм та технологій зміцнення та підтримання здоров'я студентів у процесі навчання у закладах вищої освіти. Збереження та зміцнення здоров'я молоді, повноцінний розвиток особи, підготовка компетентних фахівців є складовою частиною сучасного освітнього процесу у вищій школі.

*Ключові слова:* рухова активність студенти, фізичне виховання, фізична підготовленість, заклади вищої освіти.

**Formulation of the problem.** Recent studies on the physical activity of various socio-demographic groups have revealed some of its patterns and relationships with physical fitness. First of all, it should be noted the fundamental works of L. Nifontova, V. Zholdak, O. Pirogova on the problems of motor activity. Among modern scientists, the issues of motor activity have been studied by V. Romanenko, A. Drachuk and others. However, these studies primarily concerned the professional, applied, age and gender aspects and to some extent the regional characteristics of motor activity of different groups. There is also a study of the relationship between different types of physical culture and sports and health activities and the level of physical activity.

It is important to note that the specifics of teaching in higher education institutions of pedagogical profile are insufficiently studied. It should be noted that most of the works were of a declaratory nature, in particular, the problems of prospects of different types of physical activity, including specific physical exercises to study rational modes of motor activity of students of certain profiles of higher education. Methodological aspects of providing independent classes were studied in parallel, outside the context of the content of physical activity and its regional features, which have an impact on the formation of motivation for student participation in physical culture and sports and health work.

At the same time, taking into account the desire of students to exercise is very important, because with a limited choice of forms and types of physical culture and sports and health activities without relying on the specific interests of students, significantly reduces the number of people involved [2].

Analysis of literature sources. Given the low level of motivation of students to exercise, increase morbidity and change the status of physical education in higher education, there is a need to strengthen the sectional work based on the use of physical exercises that have both health and applied value [5]. The analysis of the scientific literature shows that the existing methods of organizing physical education in higher education institutions are not effective enough to increase the level of physical activity, physical fitness, interest of a significant number of students in physical exercises.

The problem of optimizing physical education on the basis of sports interests and motives for physical improvement of student youth has long been the subject of attention of many researchers. The effectiveness of physical education classes with a specific sports focus has been confirmed by a number of scientific studies [7].

J. Demina's scientific works indicate [4] that sedentary lifestyle prevails in modern youth, and as a result, there is such a phenomenon as hypodynamia, static overstrain of the musculoskeletal system with simultaneous relaxation of

abdominal muscles, which leads to various spinal deformities. , reducing the functioning of the respiratory and circulatory systems, slowing down metabolic processes in the body. At the same time, the student needs a high level of mental capacity, to withstand the effects of strong psychological stimuli, to be able to concentrate and quickly switch attention, to maintain optimal emotional tone during the day.

Presentation of the main material of the study. At the same time, modern students have negative trends in health, only 2-3% of young people have a high level of general health, most students experience psycho-emotional stress, do not follow the basics of a healthy lifestyle.

A characteristic feature of student youth is the low level of responsibility for their own health, the prevalence of health risk factors (smoking, alcohol, drugs, etc.). Urgent socio-pedagogical and treatment-and-prophylactic measures are needed to preserve and strengthen the health of young people. In this regard, the modern process of physical education in higher education should be aimed primarily at forming a healthy lifestyle in students, based on the activation of physical activity in young people.

Motor activity is a natural need for the harmonious development of the human body, maintaining and strengthening health in all periods of life. If a person in childhood is limited in his natural need to move, then his natural mental and physical inclinations will not receive proper progressive development.

Restriction of motor activity leads to negative functional and morphological changes in the body, reduced mental and physical performance. Of particular importance is the harmonization of physical activity and professional development of young people in the period of higher education, when high demands are placed not only on mental activity but also on physical fitness. Thus, there are contradictions between the unsatisfactory physical condition of modern youth and insufficient physical activity of students in the process of learning in higher education, as a necessary condition for strengthening and maintaining health; between the need to increase motor activity of students in the process of physical education in higher education institutions and its insufficient software and methodological support.

Currently, the problem of lack of physical activity of the population is one of the most pressing in the world. Its aggravation is due to successes in many fields of science and production. Advances in scientific and technological progress have made comfortable work and life of modern people, made it possible to move quickly over long distances and protect against natural disasters. At the same time, the new "benefits of civilization" have become the reason that modern youth does not meet the natural genetic need for motor activity, which ensures the constant functioning of responsible systems of human life. The lack of movements characteristic of our time causes disorders of the musculoskeletal system, cardiovascular, respiratory, endocrine, digestive systems, as well as overweight, depression, neuropsychiatric disorders, etc. [9].

In today's world, the health of the population is considered an indicator of the level of development of civilized society. Physical education occupies a special place in human life and formation and is the main means of organizing physical activity, which from birth determines the basis of its socio-biological existence and development [4].

Physical education is the only academic discipline in higher education institutions aimed at attracting students to a healthy lifestyle, forming a general and professional culture of the modern specialist, improving the physical and psychophysical condition of students [81].

Physical education of student youth is a holistic specialized process in which physical development is combined with mental education and upbringing, which aims to meet the needs of both the individual and society as a whole in forming a comprehensively developed person, highly qualified specialist capable of successful professional activity [3].

The importance of physical activity is growing in modern conditions of society, when due to a sharp increase in the complexity of the educational process in general secondary education, the introduction of a multilevel education system in higher education, and mass computerization reduces physical activity of children, adolescents and young people. , especially students of higher education institutions.

According to the World Health Organization, lack of physical activity is one of the main factors that negatively affects the level of physical condition and leads to mortality. Hypokinesia is an independent risk factor for chronic diseases and, according to experts, leads to 1.9 million deaths worldwide among young people. According to the official statistics of the National Academy of Medical Sciences of Ukraine, the incidence of school-age children has increased by almost 27% over the past ten years. Grade 9 64%. In higher education institutions, there is a dynamics of annual growth in the number of students who are referred to a special medical group for health reasons, their number in different regions of the country is 30-40%.

Yes, for the axis At the same time, against the background of the intensification of the educational process in higher education institutions, there is a tendency to reduce the amount of motor activity of students. Chronic deficiency of physical activity in the lifestyle of students becomes a threat to their health and normal physical development.

About 90% of students have health problems, more than 50% - poor physical fitness, while about 70% of the adult population - low and below the average level of physical health, including aged 16 - 19 years - 61 %, 20–29 years - 67.2%. In modern conditions in Ukraine there is a critical situation with the health of young people. In the last five years alone, the number of pupils and students in the special medical group has increased by 41%.

Analysis of statistical data shows that the physical condition of modern youth is assessed as unsatisfactory. More than 50% of students have a lack of physical fitness, low physical performance, there are functional disorders of organs and systems. Prolonged decline in physical activity causes further pronounced and lasting changes, which gradually become irreversible. The consequence of this is the emergence of so-called "diseases of civilization" - hypertension, atherosclerosis, coronary heart disease, myocardial infarction, vascular disease of the legs, posture disorders with lesions of the musculoskeletal system [7, 4].

A. Drachuk notes that hypodynamia has become a major factor in increasing morbidity and mortality among the population. After all, the close relationship between health and physical fitness with lifestyle, as well as the nature and extent of

daily physical activity has long been proven. Reduction of motor activity leads to a decrease in energy consumption, resulting in insufficient stimulation of growth and development, increased dependence on the environment, limited and impaired use of the gene pool [4].

T. Krutsevych points out that the reduction of motor activity reduces energy consumption, leads to insufficient stimulation of growth and development during the period of greatest plasticity and exposure to the environment, contributes to their limitation and underutilization of the gene pool. The result is low levels of physical development and functionality, which are difficult to compensate in adulthood, even through systematic training [6].

Deficiency of motor activity leads to impaired adaptation of the cardiovascular system to standard exercise, decreased VL, posture, excess body weight, increased blood cholesterol, the incidence of hypokinesia is 2 times higher than in students with sufficient levels motor activity [1].

Today in the world the issue of developing modern concepts of physical education is relevant, taking into account pedagogical, cultural, biological, psychological and other factors that affect the health of young people.

Analysis of teaching and research literature showed that the integration of education into the European higher education system requires a restructuring of the education system in the country towards intensifying educational work aimed at improving the professional competence of current and future graduates able to compete in the labor market with young professionals . from other European countries. Therefore, the modern process of study at the university makes high demands not only on educational activities, but also on the health of student youth. Intensive educational activities have a strong psychophysical impact on the young and not yet strengthened body of students. To preserve and strengthen the health of young people, their full development requires modern integrative forms of stimulating physical activity as a necessary physiological need for harmonious development and realization of mental and physical potential of young people in the process of learning in higher education. Developed, systematized and integrated forms of physical education based on the relationship of educational, extracurricular and independent processes to the following organizational and pedagogical units to increase motor activity of students in higher education: educational and health: comprehensive classes of health and play orientation; lectures, conversations about a healthy lifestyle, the need for physical activity; trainings; work with abstracts; sports and mass: sports games, sports evenings; health, cross-country skiing and weekend clubs; ; individual and independent: morning gymnastics, walks, jogging, terrenkur, independent sports; keeping a diary "Health and Movement".

Restriction of motor activity contradicts the biological laws of human development. At a low level of motor activity, everyday morphofunctional changes are not noticeable, but the negative cumulative effect of hypokinesia leads to negative changes in the body, which are manifested in reduced functional activity of organs and systems; in violation of the processes of nervous and humoral regulation; in the appearance of trophic and degenerative changes in the musculoskeletal system mouth, its neuromuscular and skeletal components; in violation of metabolic processes; in increasing the volume of adipose tissue.

**Conclusions.** Thus, it was found that among young students there is a tendency to deteriorate their health, increasing signs of lethargy, increasing manifestations of psychosomatic disorders, reduced motor activity.

One of the reasons for the low indicators of physical condition of modern youth is the decline in interest in physical education and reduced physical activity, caused by increased workload and the rapid development of information and communication technologies. Therefore, one of the most important scientific tasks of the study of this problem is the development of methods for determining the individual daily motor activity of students in the process of physical education using modern information and communication technologies.

## Reference

1. Bubley T. A. (2018) Methodology of differential education of physicists has the right of the main school scholars with health outcomes: author. dis. ... Cand. ped. Sciences: [special] 13.00.02 "Theory and technique of navchannya (physical culture, bases of health)" / Bubley Tetyana Anatoliyivna; Nat. ped. un-t im. M.P.Dragomanova. – Kiev, 19 p.

2. Domina Zh. G. (2010) Technique of navchannya has the right to coordinate the directing of the music teachers in the process of physical communication: author. dis. Cand. ped. Sciences: 13.00.02 / Zh. G. Domina .- Kiev: NPU imeni M.P. Dragomanova, - 22 p.

3. Galizdra A. (2004) Characteristics of factors influencing the health of students of higher educational institutions / A. Galizdra // Theory and methods of physical education - №3. - P. 41-43.

4. Gladoschuk O. (2018) Higher educational institution as an environment for the formation of physical culture and health self-organization of student youth / O. Gladoschuk // Scientific Bulletin of Uzhgorod National University. Series: Pedagogy. Social work. - Vip. 1. - P. 292-295.

5. Gorobey M. (1999) Computer diagnostics of health and physical fitness of schoolchildren and students / M. Gorobey // Pedagogy, psychology and medical and biological problems of physical education and sports: Coll. Science. etc. / for ed. SS Yermakov. - Kharkiv: KhDADM. - №10. - P.15-18.

6. Kruchevich T. Yu., Andreeva O. V., Blagii O. L., Sadovskiy O. O. L. Blagiy, O. O. Sadovskiy (2018)// "Molodiy Vcheniy". No. 4.2 (56.2).- S. 24-29.

7. Lawrence D. (1999)The complete guide to exercise in water / D. Lawrence // A&C Black London, 1999. – P. 15–26.

8. Redkina M. Features of physical health of students which have low motor activity / M. Redkina // The scientific heritage № 46 (4) (2020). – Budapest, 2020. – P. 53-56.

9. Tymoshenko O. (2016) Yak modernizuvati the national system of physical wickedness? Happy Holy Week / O. Tymoshenko, J. Domina // Osvita: all Ukrainian. thunder-polit. tizh. - 2016. - No. 15 (April 13-20). - S. 6; Osvita. - No. 21/22 (25 grass-1 worm). - S. 6.

10. Vincente Banachelo (1995). Hidrogimnastica / Banachelo Vincente. Santos-CER 11035-050 da Praia.-30 p.