

**PHYSICAL TRAINING AND SPORTS AMONG APPLICANTS FOR HIGHER MEDICAL EDUCATION AS A FUNDAMENTAL COMPONENT OF THEIR FUTURE MILITARY SERVICE: THE PREDISPOSITION OF MEDICAL STUDENTS TO A HEALTHY LIFESTYLE****O.M. Vlasenko<sup>1</sup>, N.D. Kozak<sup>2</sup>, I.V. Shcherbyna<sup>1</sup>, D.O. Kozak<sup>1,2</sup>, O.V. Dema<sup>1</sup>**<sup>1</sup> Bogomolets National medical university, Kyiv, Ukraine<sup>2</sup> Ukrainian military medical academy, Kyiv, Ukraine

**Introduction.** Physical education is the basis for the growth and development of a healthy body of young people. The definition, analysis and justification of their attitude to physical education, which is both a discipline of the student's choice and a separate type of activity, becomes important for the probable update of the curriculum of the discipline of the student's choice "Physical training", thematic plans and work programs.

**Purpose.** To determine the attitude of higher medical education students to the peculiarities of teaching the discipline "Physical training", the prevalence of physical education classes among them and the general interest in physical activity and sports among students.

**Materials and methods.** In the course of the study, the method of questioning was applied, followed by mathematical processing of the obtained results. 113 applicants for higher medical education who study at the Faculty of Doctors' Training for the Armed Forces of Ukraine (FDTAUFU) in the specialty 222 "Medicine" were surveyed. The questionnaire, which was distributed among students in October 2024, was discussed and approved at a methodological meeting of the Department of Physical Education and Health of the FDTAUFU.

**Results.** The study sought to highlight students' attitudes towards possible changes in educational, professional and/or training programs, that would be aimed at the correspondence of the didactic aspects of the above discipline to modern realities. Compared to the previous results of our 2020 study there was a significant increase in the share of higher medical education students who play sports in extracurricular time – from 9% in 2020 to 33% in 2024. The increase in the indicator of actual interest in sports and maintaining one's health by more than 3.5 times indicates an increase in students' interest in maintaining their health, promoting a healthy lifestyle among their peers and the invariably well-established and constantly functioning work of the staff of the Department of Physical Education and Health.

**Conclusions.** The students expressed an irrefutable desire to expand the possibility of teaching physical education for all 6 years of their stay at the university. 58.4% of all students of higher education in the specialty 222 "Medicine", who study at the faculty of doctors' training for the Armed Forces of Ukraine, voted for this option. This indicator is a confirmation of the correct vector of development and popularization of physical training among students. This contributes to the revival of students' activity in the context of maintaining their health, the functional state of their body and their compliance with the individual characteristics of an individual and the basic principles of a healthy lifestyle.

**Keywords:** physical training, medical students, military doctors, Bogomolets National Medical University, Ukrainian Military Medical Academy.

**ФІЗИЧНЕ ВИХОВАННЯ ТА СПОРТ СЕРЕД ЗДОБУВАЧІВ ВИЩОЇ МЕДИЧНОЇ ОСВІТИ ЯК ФУНДАМЕНТАЛЬНА СКЛАДОВА ЇХ МАЙБУТНЬОЇ ВІЙСЬКОВОЇ СЛУЖБИ: СХИЛЬНІСТЬ СТУДЕНТІВ-МЕДИКІВ ДО ЗДОРОВОГО СПОСОБУ ЖИТТЯ****О.М. Власенко<sup>1</sup>, Н.Д. Козак<sup>2</sup>, І.В. Щербина<sup>1</sup>, Д.О. Козак<sup>1,2</sup>, О.В. Дема<sup>1</sup>**<sup>1</sup> Національний медичний університет імені О.О. Богомольця, м. Київ, Україна<sup>2</sup> Українська військово-медична академія, Київ, Україна, м. Київ, Україна

**Вступ.** Фізичне виховання є основою росту і розвитку здорового організму молодих людей. Визначення, аналіз та обґрунтування їх ставлення до фізичного виховання, яке є одночасно дисципліною за вибором студента та окремим видом діяльності, набуває важливого значення для ймовірного оновлення навчального плану дисципліни за вибором студента «Фізичне виховання», тематичних планів та робочих програм.

**Метою** дослідження було визначення ставлення здобувачів вищої медичної освіти до особливостей викладання дисципліни «Фізичне виховання», поширеності серед них занять фізичною культурою та загальної зацікавленості фізичною активністю та спортом серед студентів.

**Матеріали та методи.** В ході дослідження був застосований метод анкетування з подальшою математичною обробкою отриманих результатів. Було опитано 113 здобувачів вищої медичної освіти, які навчаються на факультеті підготовки лікарів для Збройних Сил України (ФПЛЗСУ) за спеціальністю 222 «Медицина». Анкету, яку розповсюдили серед студентів у жовтні 2024 року, обговорили та затвердили на методичній нараді кафедри фізичного виховання та здоров'я ФПЛЗСУ.

**Результати.** Дослідження зосередилось на висвітленні ставлення студентів до можливих змін у освітніх, професійних та/або тренінгових програмах, які були б спрямовані на відповідність дидактичних аспектів зазначеної дисципліни сучасним реаліям. Порівняно з попередніми результатами нашого дослідження 2020 року спостерігалось значне зростання частки здобувачів вищої медичної освіти, які займаються спортом у позанавчальний час – з 9% у 2020 році до 33% у 2024 році. Збільшення показника фактичної зацікавленості спортом та збереження свого здоров'я більш ніж у 3,5 рази свідчить про зростання інтересу студентів до збереження свого здоров'я, пропагування здорового способу життя серед однолітків та незмінно налагодженої та постійно функціонуючої роботи колективу кафедри фізичного виховання та здоров'я.

**Висновки.** Студенти виявили неспростовне бажання розширити можливості викладання фізичного виховання на всі 6 років перебування в університеті. За цей варіант проголосували 58,4% усіх здобувачів вищої освіти за спеціальністю 222 «Медицина», які навчаються на факультеті підготовки лікарів для Збройних Сил України. Цей показник є підтвердженням правильного вектору розвитку та популяризації фізичної підготовки серед студентів. Це сприяє пошвавленню активності студентів у контексті збереження їх здоров'я, функціонального стану свого організму та відповідності власним особливостям індивіда та основним принципам здорового способу життя.

**Ключові слова:** фізичне виховання, студенти-медики, військові лікарі, Національний медичний університет імені О.О. Богомольця, Українська військово-медична академія.

**Introduction.** In the context of the realities of modern threats to the territorial integrity and sovereignty of Ukraine, instilling in students of higher medical education an interest in regular sports and physical education, especially those medical students who plan to join the ranks of the Armed Forces of Ukraine in the future, acquires new shades in the context of increasing the level of physical training of future military doctors, to expand the capabilities of their combat capability on the battlefield by forming healthy habits lifestyle and maintenance of physical fitness, which may be useful to them for the performance of their functional duties during the service.

Physical education is the basis for the growth and development of a healthy body of young people. Taking into account the fact that the vast majority of students of the faculty of doctors' training for the Armed Forces of Ukraine of the Bogomolets National Medical University (FDTAFU) are people of the early adulthood age, that is 18-25 years, the definition, analysis and justification of their attitude to physical education, which is both a discipline of the student's choice and a separate type of activity, becomes important for the probable update of the curriculum of the discipline of the student's choice "Physical training", thematic plans and work programs. These measures are possible only if these documents, which provide the educational and methodological aspects of teaching the discipline "Physical training", comply with modern views on maintaining a healthy functional state of the body of a young individual, the needs of higher medical

education applicants, as well as the capabilities of the scientific and pedagogical staff of the Department of physical training and health within the framework of ensuring the implementation of the curriculum and goals of the educational and professional program of the second (master's) level 222 "Medicine".

**The study aimed to** determine the attitude of higher medical education students to the peculiarities of teaching the discipline "Physical training", the prevalence of physical education classes among them and the general interest in physical activity and sports among students.

**Materials and methods.** In the course of the study, the method of questioning was applied, followed by mathematical processing of the obtained results. 113 applicants for higher medical education who study at the FDTAFU in the specialty 222 "Medicine" were surveyed. The questionnaire, which was distributed among students in October 2024, was discussed and approved at a methodological meeting of the Department of Physical Education and Health of the Faculty of Doctor Training for the Armed Forces of Ukraine. The obtained data were analyzed, summarized and distributed depending on the course of study of the respondents (from the 1st to the 6th year inclusive). The data of the domestic literature were analyzed to compare the results with the results of previous own research and research by other authors.

**Results.** Applicants for higher medical education of the FDTAFU were asked to answer 9 questions of the questionnaire to find out their

attitude to physical education as a type and direction of activity in general, as well as physical culture as the main structural component of the discipline of the student's choice "Physical training". In addition, the study sought to highlight students' attitudes towards possible changes in

educational, professional and/or training programs, that would be aimed at the correspondence of the didactic aspects of the above discipline to modern realities [4].

The questions of the questionnaire are listed in Table 1.

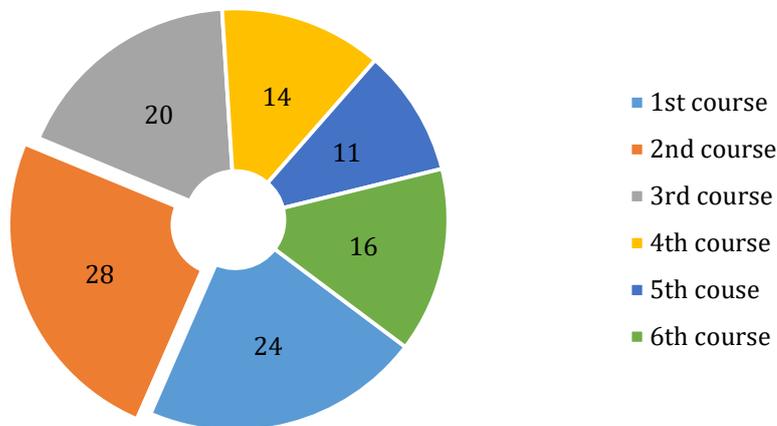
Table 1

**Questionnaire for students of 1-6 courses of specialty 222 "Medicine", future military doctors, regarding their physical activity**

No.	Questionnaire questions offered to students, future military personnel	Options indicated by students in response to the questions they have been asked				
1	Do you play sports outside of university?	Yes		No		
2	Do you choose physical training as a discipline of your choice?	Yes	Sometimes	No		
3	Do you attend sports sections or fitness clubs after studying?	Yes		No		
4	Do you play a specific sport or attend a professional sports club?	Yes		No		
5	Would you like the physical training to be a main (basic) discipline?	Yes		No		
6	Do you like the way the lesson is held (the level of teacher's training, the lesson's duration, the relevance of the curriculum to modern realities)?	Yes		No		
7	Would you prefer the probability that physical education should be taught for all 6 years (during martial law), as for a future military man (military doctor) for further admission to UMMA?	1	2	3	4	5
8	Do you exercise, run, or practice other types of physical activity every day?	Yes		No		
9	Do you have physical inactivity due to the heavy workload while preparing to the practical classes in other disciplines?	Yes	Sometimes	No		

Regarding the distribution of the surveyed respondents by the course in which they studied, it was found that most of the surveyed students were students of the 2nd year of study - 28 people (24.8%), the smallest share of respondents were students studying in the 5th year - 11 survey participants, which was 9.7% of the respondents.

It should also be noted that the survey aroused considerable interest among 1st year students, among whom there were 24 surveyed persons - 21.2% of the total number of respondents. The distribution of respondents-applicants for higher medical education of the FPLSU by courses is presented in Figure 1.



**Figure 1.** Distribution of respondents-applicants for higher education in the specialty 222 "Medicine", future military personnel, according to the course in which they study

In the course of our research, it was found that almost half of the respondents who are future military doctors, namely 52 people (46% of all survey participants) regularly go in for sports outside the jurisdiction of a higher medical education institution. There was also a significant share of those students who play sports from time to time, irregularly, 42 people (37.2% of all respondents). On the other hand, another 19 people said that they do not go in for sports regularly and do not plan to do so under any circumstances, this figure was 16.8% of the total number of respondents.

In addition, according to the results of the survey, 86 students indicated that they choose physical education as a discipline of the student's choice, this figure was 76.1% of the total number of surveyed students. The rest of the respondents (a total of 27 people, which was 23.9% of the total number of respondents) refused to choose physical education to study at the university. More than three-quarters of future doctors choose physical education as a variable component – this indicates the fact that future military personnel from their student years are deeply interested in maintaining the proper state of their health [1] and physical development of their own body [2].

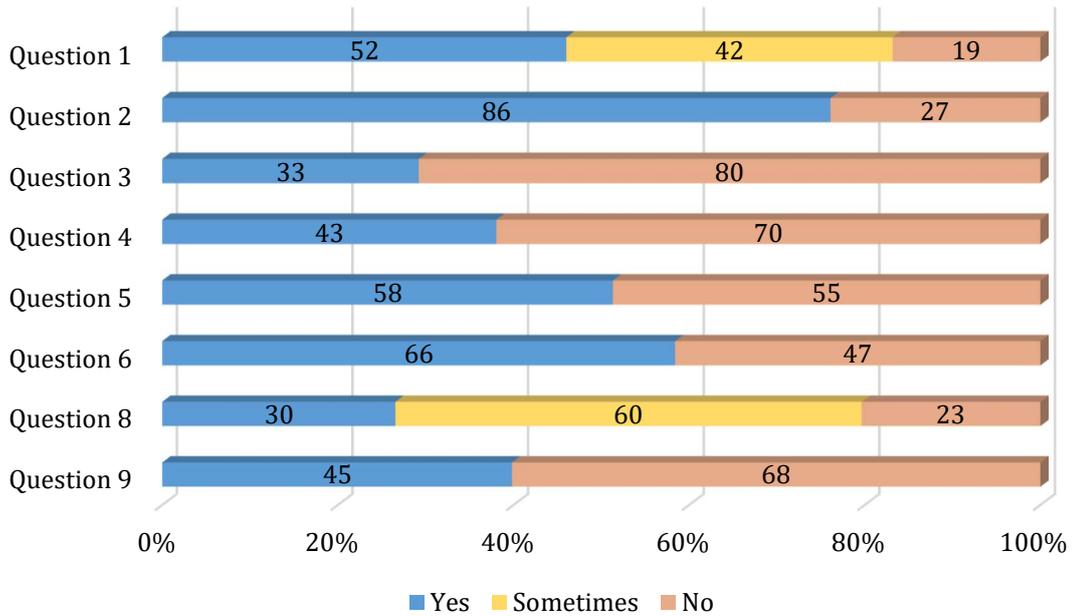
In addition, 66 students (58.4% of all respondents) expressed a desire for physical education to be included in the curriculum during all 6 years of study at a higher medical education institution (during martial law). In our opinion, the reason for this distribution of answers was that the majority of students agree with the fact that a high level of physical development is necessary for military personnel (military doctors) [6]. In turn, this can contribute to the student's positive decision to enter the Ukrainian Military Medical Academy and serve in the Armed Forces of Ukraine. Despite this, the lion's share of respondents, namely 47 people among the participants of the survey (41.6% of the total number of respondents) said that they did not want to choose physical education as a discipline of the student's choice throughout their studies at the university.

The vast majority of students, namely 80 people (70.8%) attend sports clubs and sections after completing the period of basic education, which can be considered as a voluntary choice regarding the time allotted for leisure. Despite the

fact that almost a third of the surveyed respondents do not attend sports sections, namely 33 students (29.2%), we convincingly state that the indicator of inclination to engage in sports on a voluntary basis is significant and is one of the factors contributing to the choice of the desired military medical specialization (military accounting specialty) by senior students. After passing the LII "USQE-1" (KROK-1) in the 4th year of study of the FDTAFU of O. Bogomolets NMU, almost half of the students, namely 6 out of 14 surveyed fourth-year students (42.9 % in the specified group of respondents in the context of the course of study and 5.3 % of all surveyed students) still continue to attend sports clubs. And although this indicator is falling in the future – (only 2 students out of 11 surveyed fifth-year students and 2 out of 16 surveyed participants of the survey, representatives of the 6th year graduating students) attended sports clubs and sections – we convincingly believe that these results are promising and require further action in the field of increasing students' interest in physical activity and sports. The above processes can be facilitated by both patriotic education of future military doctors, their attendance at master classes and seminars with the participation of combat medics, and increasing their interest in the subject by providing their one's own person example of a healthy lifestyle by the lecturer or tutor and promoting its individual aspects in the educational and didactic activities of scientific and pedagogical staff of departments and structural subdivisions of institutions of higher medical and pharmaceutical pre- and postgraduate education.

Students' attitudes towards the introduction of the discipline of "Physical training" as a basic core discipline were almost equally divided. And although 58 students (51.3% of students) support the above initiative, we are still of the opinion that the results of the survey obtained when answering this question are within the statistical error (the difference between the answers "Yes" and "No" is 2.6%) do not carry specific significance. From this, we conclude that the actualization of aspects of this issue requires further research and discussion.

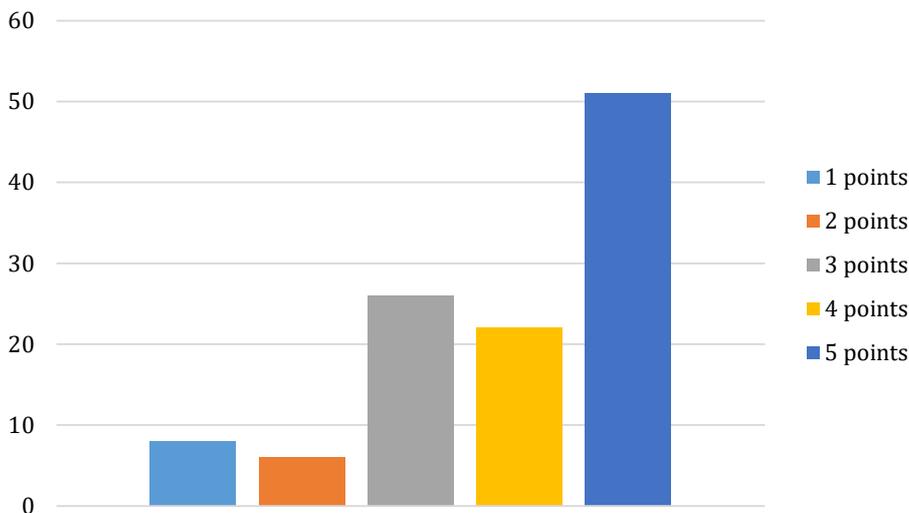
The results of the survey of students with the possibility of answering "Yes" / "No" or "Yes" / "Sometimes" / "No" are shown in Figure 2.



**Figure 2.** The results of the survey of students with the possibility of answering "Yes" / "No" or "Yes" / "Sometimes" / "No"

It is worth paying tribute to the level of training of teachers, the organizational principles of the duration of the classes themselves, as well as the compliance of teaching the subject with the modern realities of today. Among all the students' answers, almost half of them (51 students, which is 45.1% of all respondents) rated the level of training of scientific and pedagogical staff of the department of physical training and health at 5 points out of 5 possible. This is a significant and statistically significant indicator, since even the sum of indicators "3" and "4" is still less than the feedback of students to their mentors in the form of "5" points. 48 students (42.5% of the total percent) rated the level of organization of the educational process at the

above-mentioned department according to the standards "good" or "satisfactory" - "4" and "3" points, respectively. And although the gap in percentage terms is insignificant, it still takes place and, in our opinion, is evidence of high professionalism, compliance with all existing global standards, as well as the realities of wartime. A high level of motivation and a significant personal example are distinctive characteristics of the department of physical training and health of Bogomolets National Medical University, which has been repeatedly noted by both the management of this institution of higher medical education and the heads of the faculty. More detailed student responses are shown in Figure 3.



**Figure 3.** Students' assessment of the level of professional training of teachers of the department of physical training and health of Bogomolets National Medical University in the 2024-2025 academic year

Compared to the previous results of our 2020 study [3, 5] there was a significant increase in the share of higher medical education students who play sports in extracurricular time – from 9% in 2020 to 33% in 2024. The increase in the indicator of actual interest in sports and maintaining one's health by more than 3.5 times indicates an increase in students' interest in maintaining their health, promoting a healthy lifestyle among their peers and the invariably well-established and constantly functioning work of the staff of the Department of Physical Education and Health [7]. It is worth noting that the full-scale aggression of the Russian Federation on the territory of our country contributed to this process, which, in our opinion, played an outstanding role in increasing the interest of applicants, entrants and their environment as a whole in the field of physical education. However, this contribution was insignificant and is an indirect factor influencing the results of the survey and is an additional factor of greater interest of applicants, and not a determining factor influencing the phenomenon stated above.

### Conclusions

1. Interest in physical culture and sports continues to grow steadily at Bogomolets National

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Medical University. This figure in 2024 increased by almost 3.7 times compared to previous surveys conducted in 2020 in the pre-war period.

2. The students expressed an irrefutable desire to expand the possibility of teaching the course of physical education for all 6 years of their stay at the university. 58.4% of all surveyed students of higher education in the specialty 222 "Medicine", who study at the faculty of doctors' training for the Armed Forces of Ukraine, voted for this option for the development of their individual educational trajectory. This indicator is a confirmation of the correct vector of development and popularization of physical training among students, set by the leadership of the university, faculty and the relevant department.

3. The tireless efforts of the Department of Physical Education and Health of the Bogomolets National Medical University and the university administration steadily contribute to the revival of students' activity in the context of maintaining their health, the functional state of their body and their compliance with the individual characteristics of an individual and the basic principles of a healthy lifestyle.

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*A – концепція та дизайн дослідження; B – збір даних; C – аналіз та інтерпретація даних;  
D – написання статті; E – редагування статті; F – остаточне затвердження статті.*

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