

**ANALYSIS OF EVALUATION OF THE QUALITY OF THE
EDUCATIONAL PROCESS BY STUDENTS OF THE MASTER'S DEGREE
PROGRAM IN THE SPECIALTY 227.01 – PHYSICAL THERAPY**

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Purpose: to determine the level of satisfaction and quality of students' educational process in the master's program in the specialty 227.01 - Physical Therapy.

Material and methods: to achieve this goal, we used the following research methods: analysis of scientific and methodological literature, special regulations governing the process of assessing the quality of education and Internet resources, a sociological survey in monitoring mode, analysis, synthesis and synthesis of data, methods mathematical statistics.

Results: thus, 164 students took part in the study of full-time masters of the Department of Physical Therapy. Occupational Therapy of NUUPES, the average age of the subjects was 27.6 ± 0.6 years. The predominant education level was - incomplete higher education (bachelor's degree) or higher education (already received

a master's degree, but in another specialty). We can say that students of the master's program of the Department of Physical Therapy and Occupational Therapy of NUUPES, in general, are satisfied with the quality, content, and methods of teaching the subjects of the above program. Students' disadvantages followed: problems with employment, low quality of material in some disciplines, lack of work with special equipment, and discrepancies in the information content of theoretical and practical classes.

Conclusions: the use of information and communication technologies during the survey and processing of its results increases communication efficiency between the subjects and objects of examination (quality of use of the method). It ensures the efficiency and clarity of its results.

Keywords: initial process, students, surveys, physical therapy.

Introduction

Ensuring the quality of education and developing an information educational environment was identified among the priority areas of research by the NAPS of Ukraine in the 2018–2022 years. [8]. Assessing the quality of education and diagnosing the existing problems is a multidimensional problem and outlines its pedagogical basis [5].

Analysis of a modern training process in higher education institutions shows that traditional methods of diagnosing the quality of training have many significant shortcomings and limitations, bringing to the leveling and equalization of all students as individuals and future professionals (M.B. Yetukh et al., 2010) [3].

Assessing the students' existing attitudes and perceptions of professionalism is important for successful curriculum development, most likely to improve professional behavior (G.F. Blackall et al., 2007) [9].

The quality of the higher education process is determined not only by the amount of knowledge but also by the parameters of personal, ideological, civic development, and the problem of quality is considered from the standpoint of the universal and social value of education (V.O. Zinchenko et al., 2010) [4].

Thus, the use of various innovative forms and methods in educational activities will improve the quality of students' learning process and provide adequate assessment methods.

Therefore, **the research aimed** to determine the level of satisfaction and quality of students' educational process in the master's degree program in specialty 227.01 - Physical Therapy using surveying.

Material and Methods of the research

To achieve this aim, we used the following research methods: analysis of scientific and methodological literature, special regulations governing the process of assessing the quality of education and Internet resources, sociological surveying in a monitoring mode, analysis and synthesis of the data, methods of the mathematical statistics.

According to the results of the analysis of world experience on the participation of students in assessing the provision of higher education institutions with the quality of educational activities and the quality of higher education in general [1, 15], the staff of the Physical Therapy and Occupational Therapy Department of the National University of Ukraine on Physical Education and Sport developed a questionnaire "Assessment of the quality of the educational process," consisted from the questions reflecting some aspect of theoretical or practical training of future masters degree students in physical therapy. Total surveyed 164 undergraduate students of Physical Therapy and Occupational Therapy Department of the National University of Ukraine to evaluate the national system for masters education process under the EU Erasmus + project "Innovative Rehabilitation Education - Introduction New Master's Degree Programs in Ukraine."

Results of the research

The launch of a new international educational project, "Innovative Rehabilitation Education - Introduction of New Master's Degree Programs in Ukraine" (REHAB), gives an opportunity to increase the professional potential of university teachers; creation of new resources for teaching/learning/assessment; creation of a particular educational infrastructure necessary for the implementation of

a new national professional program in physical therapy [12]. The approaches implemented within the REHAB project are innovative. Therefore, the development and implementation of new (pilot) educational master's degree programs in physical therapy contribute to the training in Ukraine of high-qualified professional specialists in physical therapy according to European Union standards. [6].

Today, many studies have been conducted, outlining various aspects of assessing the educational process's quality and the factors that affect them. M. Jalili, A. Mirzazadeh, A. Azarpira (2008) investigated an assessment of medical school graduates' performance on the quality of their educational program [11]. The authors found that about 77% of respondents believed that introductory science courses have no clinical significance. 61.2% of students believed that physiology is the most clinically significant course among other introductory science courses. About 70% of respondents reported that they were not taught enough clinical skills to prepare for future clinical practice. Only 33.3% of respondents believe that they have acquired adequate knowledge and skills to start studying at the residency.

L. Sibanda, C.G. Iwu, O.H. Benedict (2015) researched the main factors influencing students' academic efficiency were identified [14]. The study identified some factors responsible for success-failure, respectively. They influenced success factors to include regular training, regular attendance, and assignments seen as hard work products. Concerning failures, factors such as lack of effort, lack of commitment, failure to complete, or timely failure to perform tasks are high.

However, pedagogical practice shows that managing educational activities is not easy, especially in a period of significant social transformations, when traditional and new factors that affect the academic sphere and the behavior of its subjects change. (O.V. Hyliun, 2012) [2]. Such elements in the physical therapy area were followed: recognition of the profession of "physical therapy," corresponds to the European structure of the health workforce, reforming and restarting the educational process following current requirements of the EU and the World Physical Therapy (WCPT), and accordingly, a review of all curricula and academic standards in the area, with the needs and professional preferences of students.

At the same time, students' use as experts on the quality of higher education process is quite successfully combined with the principle of student-centeredness, i.e., with "student orientation in providing quality educational services and managing the activities of free educational institutions [7].

Surveys are among the most common approaches to assessing students' knowledge in many disciplines [10]. This method has long been in practice, but its heyday began with introducing information technology in the educational process [13].

One hundred sixty-four students took part in the survey of full-time masters degree students of the Department of Physical Therapy, Occupational Therapy of NUUPES, the average age of the subjects was 27.6 ± 0.6 years, the predominant level of education was an incomplete higher education (bachelor's degree diploma) or complete higher education level (already received a master's degree diploma, but in another specialty).

We want to present the results that, in our opinion, have the most significant impact on the development of students as future practicing physical therapists.

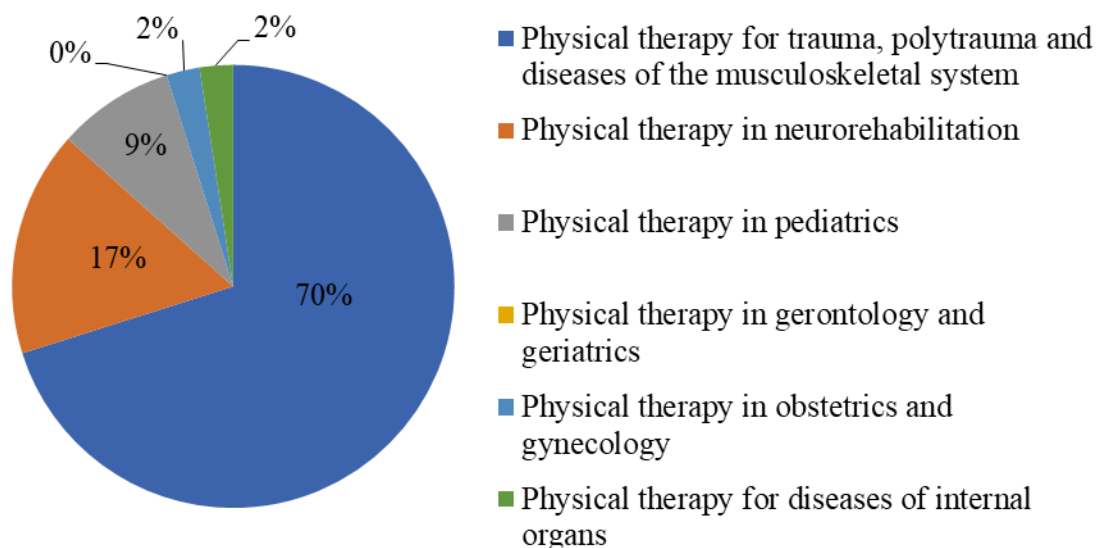


Figure 1. In what direction would you like to develop in the physical therapy and occupational therapy area?

To the question "Do you have experience in the physical therapy and occupational therapy area?" One hundred six respondents ($64,6\pm 0,3\%$) answered positively; 58 students, or $35,4\pm 0,7\%$, gave a negative answer. It can be assumed that students who gave a positive response came to study in the master's degree program of NUUPES for additional knowledge and/or skills; students who gave a negative answer - want to gain entirely new skills and knowledge.

According to the data presented in Fig. 1, the majority of respondents chose a different theoretical and practical vector of development in the physical therapy in orthopedics and traumatology area (115 students), in neurology (27 students), in pediatrics (14 students), we assume that this is due to dominant publications, availability of specialized pieces of training and availability of materials in this field.

At the same time, a low number of students who have chosen the future field of interest in the followed area: physical therapy in gerontology (0 subjects), physical therapy in obstetrics and gynecology, and internal diseases (4 students, respectively), it's connected with a lack of scientific and practical information in this area.

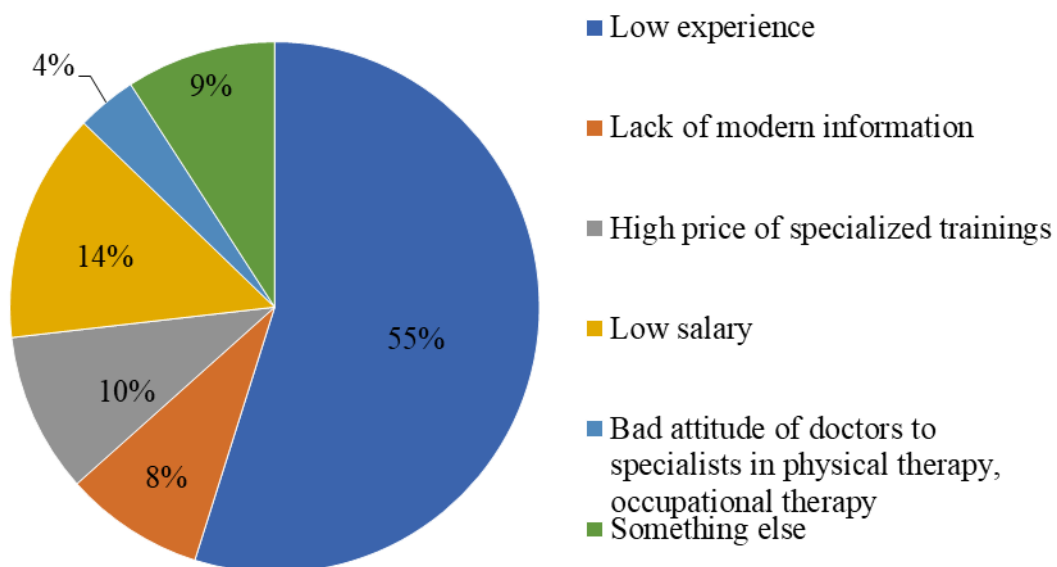


Figure 2. What prevents you from developing in the chosen physical therapy and occupational therapy direction?

The main reason that hinders the development of students who participated in the survey indicated "low experience" (90 students) due to lack of relevant practical experience in the area. The reason for the "low salary" was suggested by 23 respondents, which resulted from the preliminary review of a physical therapist's place in a medical institution. Since the lack of domestic specialists with relevant clinical experience is the reason for inviting foreign specialists to conduct training on the territory of Ukraine, which is quite a costly process, the reason for the "high price of specialized training" was indicated by 16 respondents. The answer "lack modern information" was cited as 14 students, which is due to the partial obsolescence of the content. Six respondents indicated the reason for the "bad attitude of doctors to specialists in physical therapy, occupational therapy," which is caused by the lack of understanding of some health professionals of the multidisciplinary approach to rehabilitation and the place of a physical therapist in this team. Among the "something else" answers were the following: lack of clinical practice and relevant experience, insufficient level of knowledge, long-term training, lack of structured information, little work experience.

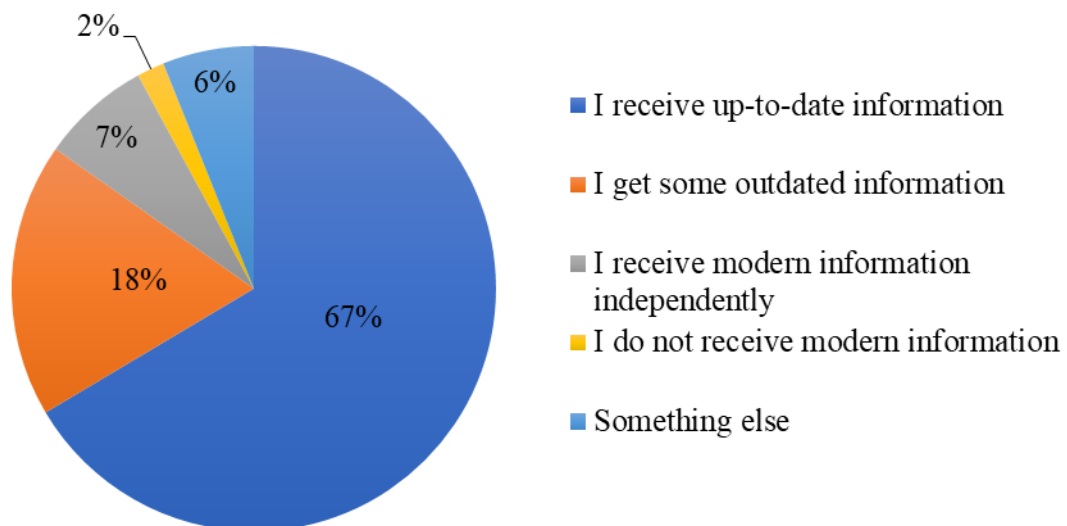


Figure 3. Do you receive up-to-date information on physical therapy and occupational therapy during your training?

One hundred nine respondents (67%) reported getting up-to-date information during education process and 30 students (18 %) said that the information they received during the study was a bit outdated, which resulted from existing changes in the preparation of masters in physical therapy. The answer "I receive modern information independently" was given by 12 students (7 %), resulting from a large amount of independent work involving ECTS. Three students (2 %) do not receive up-to-date information. Among the "something else" answers were the followed: the undesirable combination of outdated and new information, heavy workload from fundamental disciplines, low quality of teaching profile disciplines, lack of systematization (Fig. 3).

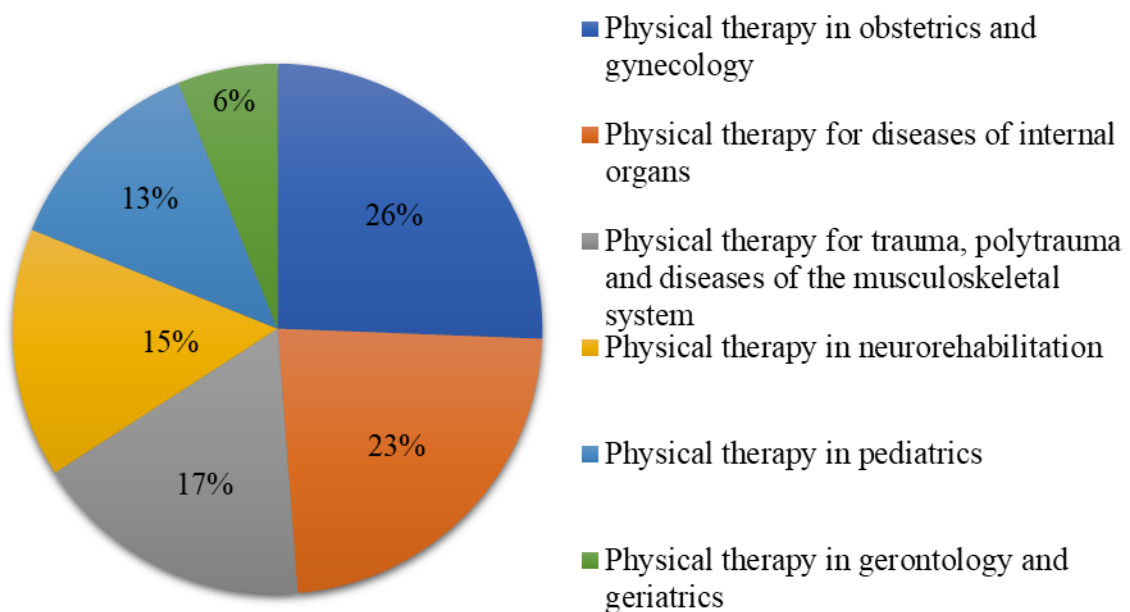


Figure 4. The least up-to-date information you receive in the field of study of such disciplines

The indicators presented in Fig. 4 are almost opposite to the data of Fig. 1. Thus, the least information surveyed students receive during the disciplines related to obstetrics and gynecology and diseases of the internal organs, 42 and 28 students (26 and 23 % respectively). This is due to the lack of physical therapy experience in these areas both in Ukraine and in the world. Almost identical indicators of the lack of modern knowledge were recorded in the disciplines related to physical therapy in

orthopedics and traumatology, neurology, and pediatrics. These disciplines were noted by 28 (17 %), 25 (15 %), and 21 (13 %) students, respectively. Lack of new information during the courses related to physical therapy in gerontology and geriatrics was noted by ten students (6%).

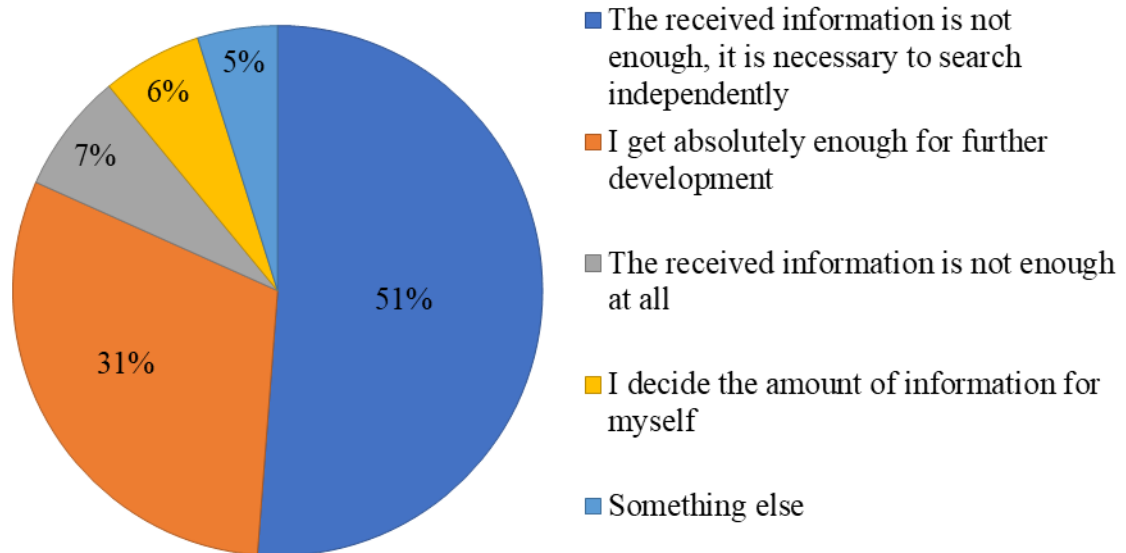


Figure 5. Is the provided theoretical and practical information enough for you to further develop in the physical therapy and occupational therapy area?

Based on the data presented in Fig. 5, the majority of respondents, 84 students (51 %), chose the answer "the amount of information received is not enough, you need to search independently," which can be explained by the large amount of independent work that ECTS has. Fifty students receive a sufficient amount of information (31 %). The research problem's subjective nature can be distinguished in the case of students' choice of answers "the amount of information is not enough at all" and "the amount of information I decide for myself." Among the "something else" answers were the following: lack of practical skills, difficulty to assess, the amount of information does not fully correspond.

During the survey, it was found that the same number of students, 67 (14 %) respectively, chose the answers that the theoretical information fully corresponds to

the practical skills in the classroom, and there is a slight discrepancy between the information in the theoretical and practical classes (Fig. 6).

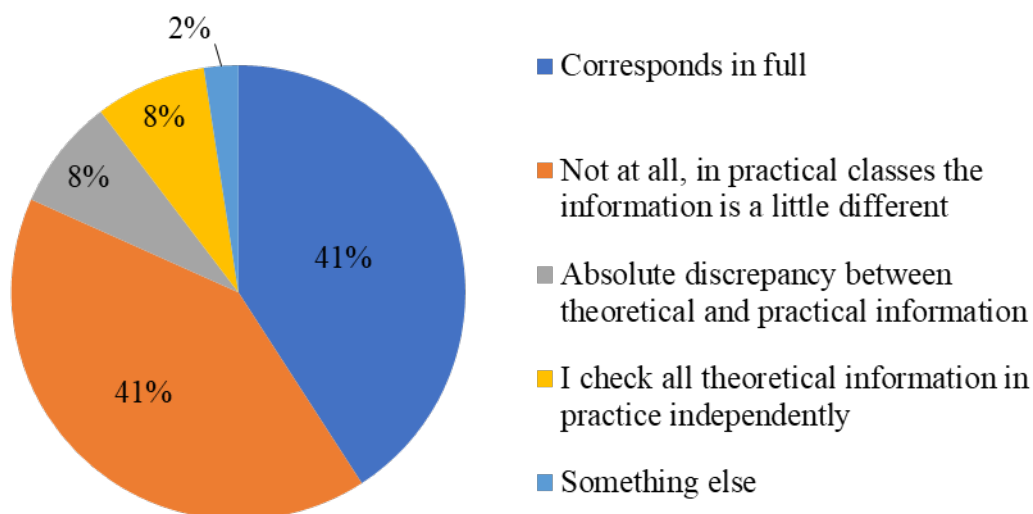


Figure 6. Is the theoretical information provided to you correspond to practical skills in physical therapy and occupational therapy?

This is due to the consistency and appropriate research and teaching qualifications, especially if several leads the same discipline.

The opposite was indicated by 13 students (8 %), according to whom there is a significant discrepancy between the information in theoretical and practical classes. Also, 13 students (8 %) indicated that all academic information is checked in their practice, which may indicate respondents' employment. Among the answers "something else" was the followed: lack of practical skills, difficulty to assess, expectations of clinical practice, the level of knowledge does not fully meet.

As the most effective training forms, the subjects noted situational tasks and test tasks in 116 and 24 cases (71 and 15 %), respectively (Fig. 7).

This may be due to similar tasks in the examination requirements for admission to the master's program and the requirements for state certification. Surveys and answers were selected in 17 cases (10 %) express control in 7 cases (4 %).

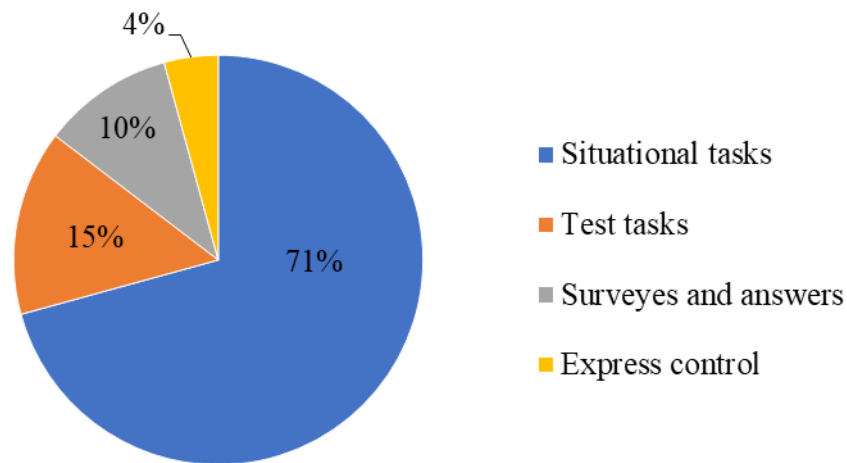


Figure 7. What form of practical training is most effective in the learning process?

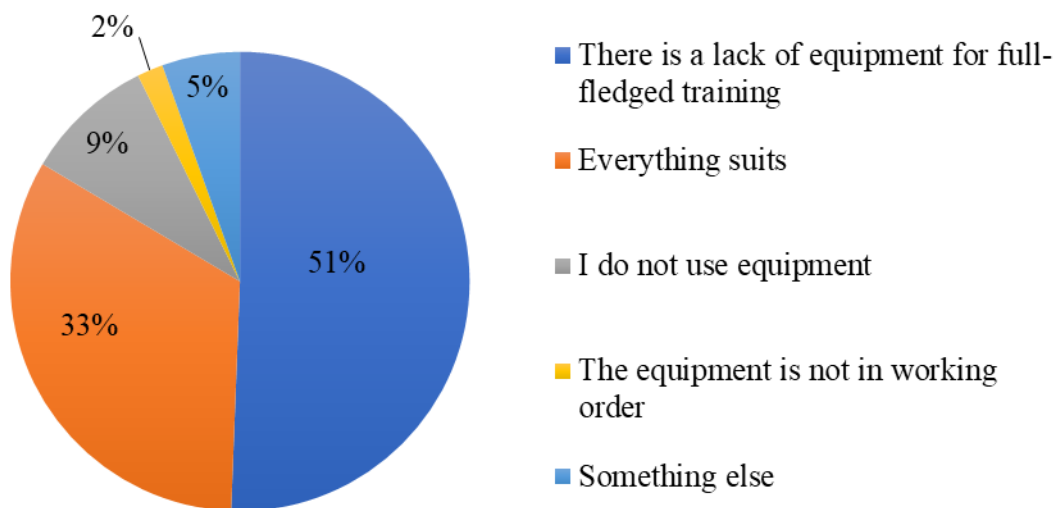


Figure 8. Are you satisfied with the quality and quantity of rehabilitation equipment for practicing practical skills at the university?

Eighty-three students (51 %) do not have enough equipment to sufficiently practice their skills; however, within the REHAB project framework, it is planned to purchase rehabilitation equipment that will meet international standards for rehabilitation care (Fig. 8). Students who noted that they are completely satisfied with the quality of the number of rehabilitation equipment in the initial process were 54 people (33 %). Respondents who do not use equipment in their educational process,

in our opinion, have not yet encountered clinical cases where the use of additional equipment is required.

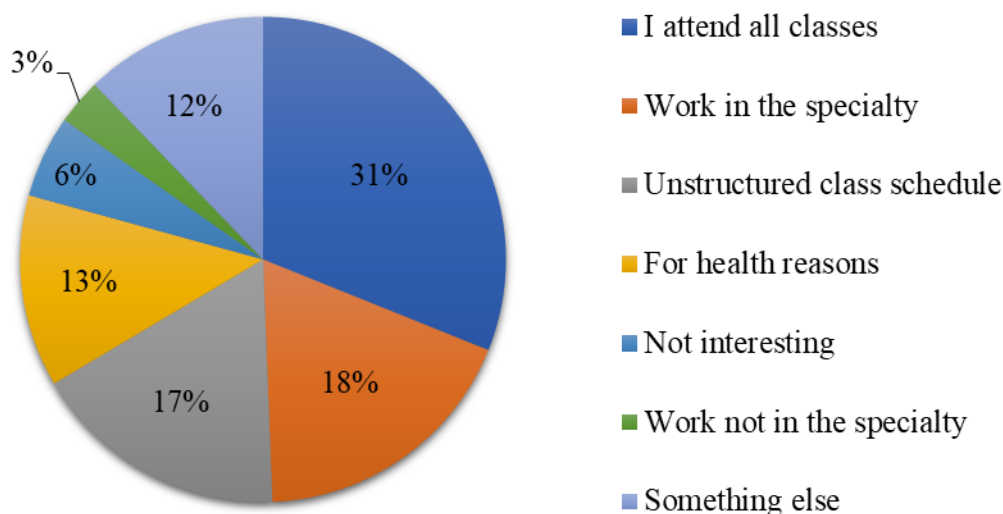


Figure 9. For what reasons do you mostly not attend classes?

As shown in Fig. 9, the main reason for their absence from classes students noted: "work in the specialty" in 30 cases (18%). Such an organizational shortcoming as "unstructured schedule" was stated by 28 respondents (17%). Twenty-one respondents (13%) missed classes due to their health condition. Also, among the reasons for absence from studies, students noted: "work outside the specialty" and lack motivation. Among the answers "something else" was the followed: personal affairs, family circumstances.

To the question, "Have you encountered a biased and disrespectful attitude on the part of teachers while assessing your knowledge in the learning process?" Sixty respondents gave a positive answer (37%), 104 (63%) showed a negative response.

Analyzing the data of Fig. 10, it can be concluded that currently, there are some problems with the employment of future physical therapists in Ukraine, despite a legal basis in the field. Thus, during the survey, 67 students (41%) indicated the main employment problem is inadequate working conditions. Fifty-two respondents (32%) said that their knowledge level does not allow them to hold the desired position.

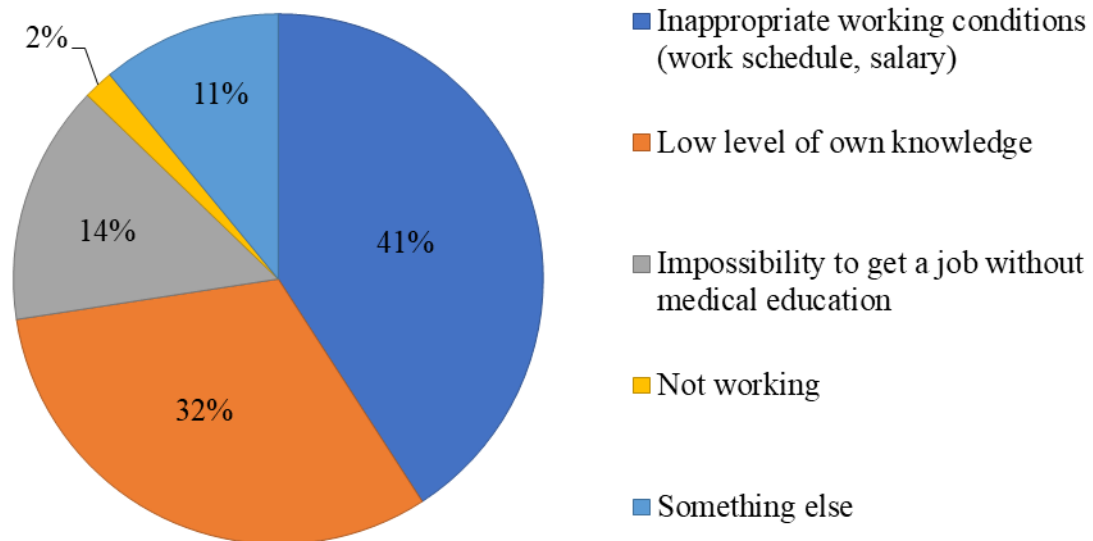


Figure 10. What problems did you face during the hiring?

The answer "impossibility to get a job without medical education," in our opinion, was indicated by those students who faced employment ignorance of employers with the legislative sphere in the physical therapy area. Among the answers "something else" was the followed: already working in the specialty, low salary, incomplete education, did not get a job, the coincidence of the work schedule with the educational process, the absence and/or did not face problems.

It is nice to note that despite all the negative aspects and the lack of specific knowledge and practical skills, 119 students (73%) want to work in Ukraine. Respondents who answered the question "Where do you plan to develop in the physical therapy and occupational therapy area?" answered "abroad" was 45 (27%).

At the time of the survey, 142 students (87%) showed a desire to develop in the physical therapy area, 15 people had no desire (9%), it was impossible to determine - 2 students (1%) (Fig. 11).

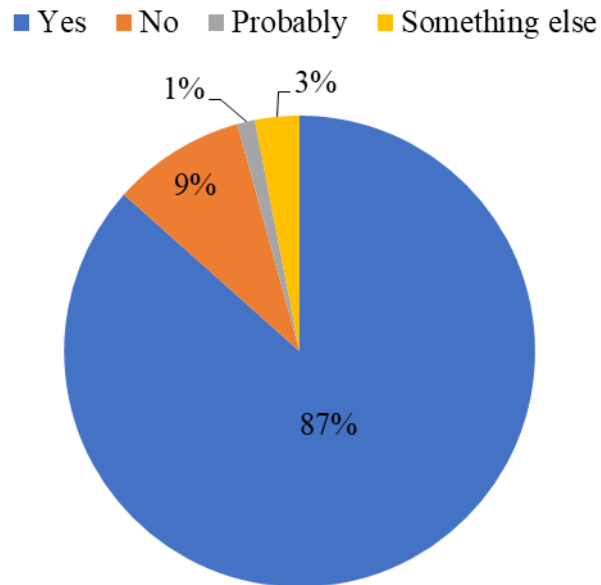


Figure 11. Do you want to develop in the physical therapy and occupational therapy area?

Among the "something else" answers was the followed: yes, but abroad, after additional training, the choice will depend on the situation in Ukraine.

So, summarizing the study, we can say that students of the master's degree program of the Department of Physical Therapy and Occupational Therapy NUUPES, in general, are satisfied with the quality, content, and methods of teaching the subjects of the above program. However, students also noted shortcomings; there are followed: problems with employment, low quality of material in some disciplines, the absence or inability to work with special equipment, and differences in the content of theoretical and practical classes.

Conclusions / Discussion

Under conditions when the social needs, interests, and values of young people are dynamically changing, when higher education in Ukraine has become widespread, and higher education institutions have become diverse not only in areas of training but also informs and quality of educational services, the selection process higher education, the future profession is becoming more pragmatic.

The detailed scientific and methodical literature analysis showed that students' survey is a universal, simple and effective component of assessing various parts of the educational process and factors influencing student success [9, 10, 15]. The data obtained during this study confirm the authors [1, 3, 4, 7] about student surveys are a universal tool for assessing education quality. However, during our research, we concluded that the creation, editing, and further modernization of educational programs in physical therapy should bring the following components, there are followed: academic motivation of students, transformations, and reforms in health care in Ukraine, and international experience and world standards [2, 6, 11].

The use of information and communication technologies during the survey and processing of its results increases communication effectiveness between subjects and objects of examination (quality of use of the method). It ensures the efficiency and clarity of its products [5, 13, 14].

Thus, monitoring and evaluating the learning process's quality is a mandatory procedure for monitoring the quality of the educational process and student satisfaction, allowing you to solve the educational process's problems quickly.

Prospects for further research are to assess the quality of clinical practice by students of the master's degree program.

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References

1. Bilyi, A. K., Furyk, O. O. Kostrovskyi, O. M. (2018), "Vybir instrumentariyu dlia prohodzhennya opytuvannia studentiv v ramkakh proektu «TAME: navchannia na meduchnykh pomylkakh»", Aktualni pytannia dystantsiynoi osvity ta telemedytsyny: Materialy Vseukrainskoi naukovo-metodychnoi videokonferentsii z mizhnarodnoyu uchastiu, 25-26 kvitnia 2018, Zaporizhzhya, pp. 84 – 85. (in Ukr.).

2. Hyliun, O. V. (2012), "Osvitni motyvatsiyi studentskoi molodi", Hrani, №1(81), pp. 102 – 104. (in Ukr.).
3. Yevtukh, M. B., Luzik, E. V., Dybkova, L. M. (2010), Innovatsiyni metody otsiniyuvannia navchalnykh dosiagnen: monograph. K.: KNEU, 248 p. (in Ukr.).
4. Zinchenko, V. O. (2013), Monitorynh yakosti navchalnoho protsesu u vyshchomu navchalnomu zakladi : monograph, Luhansk : LNU imeni Tarasa Shevchenka, 360 p. (in Ukr.).
5. Kubanov, R. A. (2013), "Yakist osvity: sut' poniattia ta osoblyvosti otsiniyuvannia", Visnyk LNU imeni Tarasa Shevchenka, № 13(272), pp. 25 – 31. (in Ukr.).
6. Lazarieva, O., Zharova, I., Kravchuk, L., Kormiltsev, V., Bannikova, R. Havreliuk, S. (2019), "Shliakhy stanovlennia vitchyznianoyi systemy pidhotovky magistriv iz fizychnoi terapii v ramkakh proektu REHAB", Molodizhnyi naukovyi visnyk Skhidnoyevropeyskoho natsionalnoho universytetu im. L. Ukrayinky, №33, pp. 15 – 19. (in Ukr.).
7. Moroz, V. M., Sadkovyi, V. P., Babaiev, V. M. and Moroz, S. A. (2018), "Online opytuvannia studentiv u systemi zabezpechennia yakosti vyshchoi osvity", Informatsiyni tekhnologii i zasoby navchannia, № 6(68), pp. 235 – 250. (in Ukr.).
8. Priorytetni napriamy naukovykh doslidzhen' NAPN Ukrainy na 2018–2022 yy. Access at: <http://naps.gov.ua/ua/press/announcements/1315/> (in Ukr.).
9. Blackall, G. F., Melnick. S. A., Shoop, G. H., George, J., Lerner, S. M., Wilson, P. K., Pees, R. C., Kreher, M. (2007), "Professionalism in medical education: The development and validation of a survey instrument to assess attitudes toward professionalism", Medical Teacher, vol. 29(2-3), pp. 58 – 62. Doi: 10.1080/01421590601044984 (in Eng.).
10. Calender C. and Jackson J. (2005), "Does the fear of debt deter students from higher education?", Journal of social policy, vol. 34 (4), pp. 509 – 540. (in Eng.).
11. Jalili, M., Mirzazadeh, A., Azarpira, A. (2008), "A Survey of Medical Students' Perceptions of the Quality of Their Medical Education upon Graduation", Ann Acad Med Singapore, vol 37, pp. 1012 – 8. (in Eng.).

12. Innovative Rehabilitation Education – Introduction of new master degree programs in Ukraine (REHAB). URL: <http://rehabeukr.eu/> (in Eng.).
13. Sharifi, B., Ghafarian Shirazi, H. R., Momeninejad, M., Saniee, F., Hashemi, N., Jabarnejad, J., and Malekzade, M. (2012), "A survey of the quality and quantity of clinical education from the viewpoint of medical students", J Jahrom Univ Med Sci, vol. 10(2), pp. 48 – 53. (in Eng.).
14. Sibanda, L., Iwu, C. G., and Benedict, O. H. (2015), "Factors influencing academic performance of university students", Demohrafiya ta sotsial'na ekonomika, №2, c. 103 – 115. doi: <http://dx.doi.org/10.15407/dse2015.02.103> (in Eng.).
15. Soriano, R. P., Blatt, B., Coplit, L., Kelly, E.C., Kosowicz, L., Newman, L., Pasquale, S. J., Pretorius, R., Rosen, J. M., Saks, N. S., and Greenberg L. (2010), "Teaching Medical Students How to Teach: A National Survey of Students-as-Teachers Programs in U.S. Medical Schools", Acad Med., vol. 85, pp. 1725 – 1731. (in Eng.).

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