

Formation of readiness of future occupational therapists to use modern rehabilitation technologies in profession

Viktoriia Donchenko¹, Valeriy Zhamardiy¹, Olena Shkola², Olena Fomenko³, Nataliia Khlus⁴, Olena Kabatska⁵, Alla Heta⁶

¹DEPARTMENT OF PHYSICAL AND REHABILITATION MEDICINE, POLTAVA STATE MEDICAL UNIVERSITY, POLTAVA, UKRAINE

²DEPARTMENT OF PHYSICAL EDUCATION, MUNICIPAL ESTABLISHMENT «KHARKIV HUMANITARIAN PEDAGOGICAL ACADEMY» OF KHARKIV REGIONAL COUNCIL, KHARKIV, UKRAINE

³DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS IMPROVEMENT, MUNICIPAL ESTABLISHMENT «KHARKIV HUMANITARIAN PEDAGOGICAL ACADEMY» OF KHARKIV REGIONAL COUNCIL, KHARKIV, UKRAINE

⁴DEPARTMENT OF THEORY AND METHODS OF PHYSICAL EDUCATION, OLEKSANDR DOVZHENKO HLUKHIV NATIONAL PEDAGOGICAL UNIVERSITY, HLUKHIV, UKRAINE

⁵DEPARTMENT OF SPECIALIZED TRAINING OF THE EDUCATIONAL AND RESEARCH INSTITUTE OF INTERNATIONAL EDUCATION, V. N. KARAZIN KHARKIV NATIONAL UNIVERSITY, KHARKIV, UKRAINE

⁶DEPARTMENT OF PHYSICAL CULTURE AND SPORTS, NATIONAL UNIVERSITY «YURI KONDRATYUK POLTAVA POLYTECHNIC», POLTAVA, UKRAINE

ABSTRACT

Aim: The aim of the study is to determine, substantiate and experimentally test the effectiveness of proposed didactic conditions for the formation of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

Materials and Methods: The program of the local pedagogical experiment was implemented through the realization of ascertaining (2022–2023) and formative (2023–2024) stages. Pedagogical experiment involved students in the specialty 227 Therapy and Rehabilitation, field of knowledge 22 Health care of the Poltava State Medical University (Ukraine).

Results: The analysis of the results of the formative experiment, during which students studied according to the implementation program in the system of professional training in a medical institution of higher education under specified didactic conditions, shows positive changes in the levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

Conclusions: The model proposed by the authors of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities improves the quality of education of occupational therapists and better prepares them for practical activities.

KEY WORDS: health, readiness, occupational therapists, rehabilitation technologies, professional activities, patients

Acta Balneol. 2024;66(6):392-399. doi: 10.36740/ABAL202406104

INTRODUCTION

The modern system of higher medical education in Ukraine is characterized by a dynamic renewal of the educational space. One of the defining trends in modern higher medical education is the training of occupational therapists, able to perform their professional duties at a high level, provide rehabilitation care, carry out medical and diagnostic process using rehabilitation technologies in professional activities, to lay a solid foundation of health of the population, as well as capable to solve complex problems and problems in the field of health care in the specialty 227 Therapy and

Rehabilitation in professional activities, to professional development, continuous professional self-development. Theoretical analysis of scientific works, acquaintance with the results of scientific and practical experience of medical institutions of higher education on the outlined problem

allowed to identify a number of contradictions between: society's need for highly professional occupational therapists and the actual level of their training to perform professional duties in modern conditions; potential opportunities for training future occupational therapists to use modern rehabilitation technologies in professional activities in medical institutions of higher education and the lack of scientifically sound didactic conditions for this activities; requirements for the level of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities and the imperfection of traditional methods and technologies of its formation; the need to increase the level of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities and the lack of appropriate diagnostic tools to monitor this process [1-3].

AIM

The aim of the study is to determine, substantiate and experimentally test the effectiveness of proposed didactic conditions for the formation of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

MATERIALS AND METHODS

The program of the local pedagogical experiment was implemented through the realization of ascertaining (2022-2023) and formative (2023-2024) stages. They made it possible to state the state of the researched problem, to understand and formulate the purpose of the research, to outline the tasks of the experimental work, to clarify the theoretical foundations of the formation of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

The confirmatory stage of the pedagogical experiment provided for the diagnosis of the levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities to defined criteria. A package of complex tasks (tests, situational cases with tasks, the solving of which demonstrates the ability and skills to use modern rehabilitation technologies in the work of a occupational therapy) served as a diagnostic toolkit. In the conditions of distance learning, the forms of communication and interaction between the participants of the educational process also changed. They can be combined into two groups: asynchronous communication - e-mail correspondence, forwarding of educational materials, file sharing, video instructions, etc.; synchronous communication: chat - instant messaging, online counseling; video and audio communication - conversations, discussions online. The formative stage of the experiment involved the implementation of the author's model of the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities was developed, consisting of methodological-target, implementation-technological and diagnostic-resultative blocks.

Pedagogical experiment involved students in the specialty 227 Therapy and Rehabilitation, field of knowledge 22 Health care of the Poltava State Medical University (Ukraine). The hypothesis of the research was formulated, which lies in that the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities will be effective if following didactic conditions are implemented:

1. Actualization of the possibilities of the medical institution of higher education as an innovative environment for the study of modern rehabilitation technologies.
2. Introduction and use in the process of professional training of students of the workshop «Modern rehabilitation technologies».
3. Implementation of a resource-based approach in the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

4. Monitoring of the process of formation of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities is carried out using a set of criteria (motivational, cognitive, activity and self-education).

A set of following research methods was used to achieve the goal and to test the hypothesis:

- *theoretical* - analysis, synthesis, comparison, generalization and systematization of the obtained data in order to compare different views of scientists on the research problem, clarification of the concept of «readiness of future occupational therapists to use modern rehabilitation technologies in professional activities», determination of its structural components, clarification of methodological approaches that characterize the current state of training of future occupational therapists in the system of higher medical education, substantiation of didactic conditions; modelling - to build a model for monitoring the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities;
- *empirical*: (questionnaire, testing, conversation) - to diagnose the level of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities; pedagogical experiment - in order to check the effectiveness of didactic conditions and the model;
- *mathematical statistics* - combination of quantitative and qualitative analysis of the received empirical material using the Pearson's χ^2 test in order to justify the reliability of the obtained results, a graphical representation of the quantitative and qualitative analysis of the results of the pedagogical experiment.

RESULTS

On the basis of the analysis of scientific literature and the practice of medical institutions of higher education, it was found that the problem of training future occupational therapists to use modern rehabilitation technologies in professional activities remained outside the scope of the study of scientists, which is an important component of the system of professional training of occupational therapists in medical institutions of higher education, and therefore, a guarantee of the future successful professional activity[4-6]. Based on the understanding of the scientific literature, the essence of the concept of «training of future occupational therapists in professional activities» was substantiated as a purposeful dynamic process of training students, aimed at forming the ability to apply the acquired knowledge, skills and abilities in working with a wide range of modern rehabilitation technologies for the treatment of diseases, as well as in establishing a constructive interaction with the patient as a subject of his own health care.

Readiness of future occupational therapists in professional activities is considered as a holistic personal dynamic formation acquired as a result of special training, which is characterized by the ability of the applicant in practice in real conditions

to demonstrate his knowledge of the principles of operation and use of various categories of modern rehabilitation technologies, and as a set of practical skills for working with it for the organization of the treatment and diagnostic process, and a focus on successfully mastering the latest modern rehabilitation technologies.

In the structure of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities, the following components were distinguished: *motivational, cognitive, activity and self-educational*.

Motivational component characterizes the student's interests, motives for mastering modern rehabilitation technologies, striving for professional growth and competitiveness in the market of medical services in the field of therapy and rehabilitation.

Cognitive component determines the set of fundamental knowledge that is necessary and sufficient for the use of rehabilitation technologies in the future professional activity of occupational therapists.

Active component reflects the set of abilities and skills to successfully implement their functional duties when providing rehabilitation care to patients and their families with the use of modern rehabilitation technologies in the future professional activity of future occupational therapists. *Self-educational component* stands for the student's ability to carry out self-educational activities in the context of mastering the methods of modern rehabilitation technologies, the desire for self-education, self-development and self-control. Based on a comprehensive study of the criteria and their indicators, three levels of readiness were differentiated: *low, medium and high*.

Didactic conditions were singled out in view of methodological approaches (competence-based, comprehensive, health-preserving and preventive, multidisciplinary, internationalization, prognostic, environmental, technological, resource-based) and principles (didactic: scientificity, accessibility, strength of knowledge, systematicity and consistency, clarity, practical focus of learning, awareness and activity of learning, individualization of training, control and correction of knowledge; specific: interactivity, parity, contextual learning, constructive communication, freedom of choice, informed perspective, continuous professional development).

The first didactic condition - actualization of the possibilities of a medical institution of higher education as an innovative environment for studying modern rehabilitation technologies - involves the search for implementation mechanisms for improving the spatial-objective, subject, axiological-semantic, informational and educational, substantive and procedural components of such an environment as an open system of opportunities and resources for development, self-development, support of students and scientific and pedagogical workers in the process of training future occupational therapists to use modern rehabilitation technologies in professional activities on the basis of pedagogical innovations.

During the implementation of this didactic condition, special attention was focused on the generation of innovative

flows in a medical institution of higher education (generating new productive ideas for the purpose of developing and implementing pedagogical innovations for the continuous improvement of the process of professional training of students); increasing the innovative potential of a medical institution of higher education (improvement of the educational process using material and technical, organizational and managerial, educational and developmental innovations, etc.); preservation of local, administrative innovations, traditional and innovative author's methods of teaching students; improvement of spatial-subject, subject, axiological-semantic, informational-educational, content and procedural components innovative educational environment of a medical institution of higher education. Taking into account the specific principles, a strategy for training future occupational therapists to use modern rehabilitation technologies in professional activities was proposed; creation of modern rehabilitation centers, training rooms «Occupational therapy office», author's pedagogical workshops of the type «Ergotherapy» as a permanent consultation center, which introduces original forms and methods of teaching future occupational therapists to work with modern rehabilitation technologies; development of special educational, methodical and informational resources that will ensure the traditional and remote educational process, is directly focused on the process of preparing future occupational therapists to use modern rehabilitation technologies in professional activities[7-9].

The second didactic condition - introduction and use in the process of professional training of students of the workshop «Modern rehabilitation technologies» - aimed at implementing the content of the workshop, the method of implementation of which can be disclosed in the following recommendations:

1. The development of tasks for the workshop should take into account didactic principles (scientificity, accessibility, solidity of knowledge, systematicity and consistency, clarity, practical orientation of learning, awareness and activity of learning, control and correction of knowledge) and specific principles of training future occupational therapists to use modern rehabilitation technologies in professional activities (interactivity, parity, contextual learning, constructive communication, freedom of choice, informed perspective, continuous professional development).
2. Guided by the principles of individualization of training, interactivity, freedom of choice, with the aim of providing free access to materials of the workshop, the online platform «Modern rehabilitation technologies» with digital content was developed and used.
3. The content of the workshop «Modern rehabilitation technologies» focuses on the model of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities (motivational, cognitive, activity and self-educational components).
4. The use of a number of interactive teaching methods, which are aimed at the assimilation of future occupa-

tional therapists at the same time as classroom professionally oriented components of the work and the use of modern rehabilitation technologies in professional activities: simulation methods, business games, the consilium method, the case method, the incident method, take a position (own opinion), discussion during the discussion of patient treatment tactics, situational modeling, methods of using virtual and augmented reality, etc.

5. The teacher's activity in teaching the practical is characterized by the following features: the teacher guides the discussion of the problem presented in the practical tasks for the modules; the teacher organizes the independent activity of students in a simulated situation, which makes it possible to combine theoretical training with practical skills and abilities, apply the theoretical basis to solving practical situations that may arise in the real professional activity; the methods used and moderated by the teacher during the discussion of tasks should be interactive.
6. The result of work on practical tasks - formulating a practical solution to a problem or situation based on a deep and comprehensive analysis, evaluation of decision algorithms proposed by future occupational therapists, selection of the best option in the context of a task or problem, which requires the use of modern rehabilitation technologies in professional activities.

The third didactic condition - implementation of a resource-based approach in the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities - involves orientation to the principles of parity, contextual learning, freedom of choice, continuous professional development and individualization of learning.

This condition was implemented thanks to:

- organization of resource-based training in the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities as such an organization of training that takes into account the individual needs and capabilities of the future occupational therapists, is built on the principles of stimulating independent cognitive activity of students to master the skills of active transformation of the information environment, students' assimilation of knowledge in the field of rehabilitation and modern rehabilitation technologies in professional activities and promotes the development of a digitally and professionally competent personality, orientation towards professional formation, professional self-development of future occupational therapists by introducing elements of self-education into the educational process;
- careful planning of self-educational work of students in the context of forming their readiness to use modern rehabilitation technologies in professional activities of future occupational therapists (use of project technologies - individual projects, web quests);
- usage of future occupational therapists portfolio of readiness to use modern rehabilitation technologies in

professional activities as a method of recording, accumulating and evaluating the individual achievements of a student in a certain period of his educational, especially independent activity (during the implementation period of the workshop «Modern rehabilitation technologies», for the entire period of study at the medical institution of higher education);

- creation of a resource base for self-mastery of methods of using modern rehabilitation technologies in professional activities of a future occupational therapists.

The fourth didactic condition - monitoring of the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities is carried out using a set of criteria (motivational, cognitive, activity and self-educational) - involves conducting diagnostic procedures of studied readiness according to defined criteria and three levels (low, medium, high).

Motivational criterion expresses the degree of development of interests, motives for mastering modern rehabilitation technologies during training, the desire for professional growth and competitiveness in the market of medical services in the field of therapy and rehabilitation.

Cognitive criterion characterizes the set of fundamental knowledge that is necessary and sufficient for the use of modern rehabilitation technologies in the future professional activity of a future occupational therapists.

Activity criterion reflects the degree of development of abilities and skills to successfully implement their functional duties in providing rehabilitation care to patients and their families using modern rehabilitation technologies in the future professional activity of a occupational therapists.

Self-education criterion reflects the degree of development of skills to carry out self-educational activities in the context of mastering the methods of using modern rehabilitation technologies in the professional activity of a occupational therapists, desire for self-education, self-development and self-control.

The analysis of indicators of the level of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities made it possible to establish that: according to the *motivational criterion*, 20% of students demonstrated a high level of readiness, medium - 30.59%, low - 49.51%; according to the *cognitive criterion*, 8.24% of students demonstrated a high level of readiness, medium - 56.86%, low - 34.90%; according to the *activity criterion*, 4.31% of students demonstrated a high level of readiness, medium - 51.76%, low - 43.92%; according to the *self-education criterion*, 9.41% of students showed a high level of readiness, medium - 33.73%, low - 56.86%. Therefore, the results of the ascertainment stage of the experiment proved the insufficient level of readiness of the students, which determines the need to improve the process of preparing future occupational therapists to use modern rehabilitation technologies in professional activities by implementing certain didactic conditions.

Within the framework of the experiment, a monitoring model of the process of forming the readiness of future occupational therapists to use modern rehabilitation

technologies in professional activities was developed, consisting of *methodological-target, implementation-technological and diagnostic-resultative blocks* (Fig. 1).

The *methodological-target block* of the model contains the goal, methodological approaches, didactic and specific principles of formation the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities as a basis for achieving the defined research goal.

The *implementation-technological block* of the model reflects the didactic technologies that were used in the context of preparing students for the use of modern rehabilitation technologies of specified didactic conditions.

The *diagnostic-resultative block* is determined by the purpose of the study and the specifics of the content of

the study determined for conducting the experimental study. It highlights the criteria and levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities, diagnostic toolkit for its assessment, as well as the result, namely, the positive dynamics in the levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

The implementation of the model was ensured by the implementation of a complex of defined didactic conditions for the formation of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

During the experiment, the importance and effectiveness of the strategy of preparing future occupational therapists

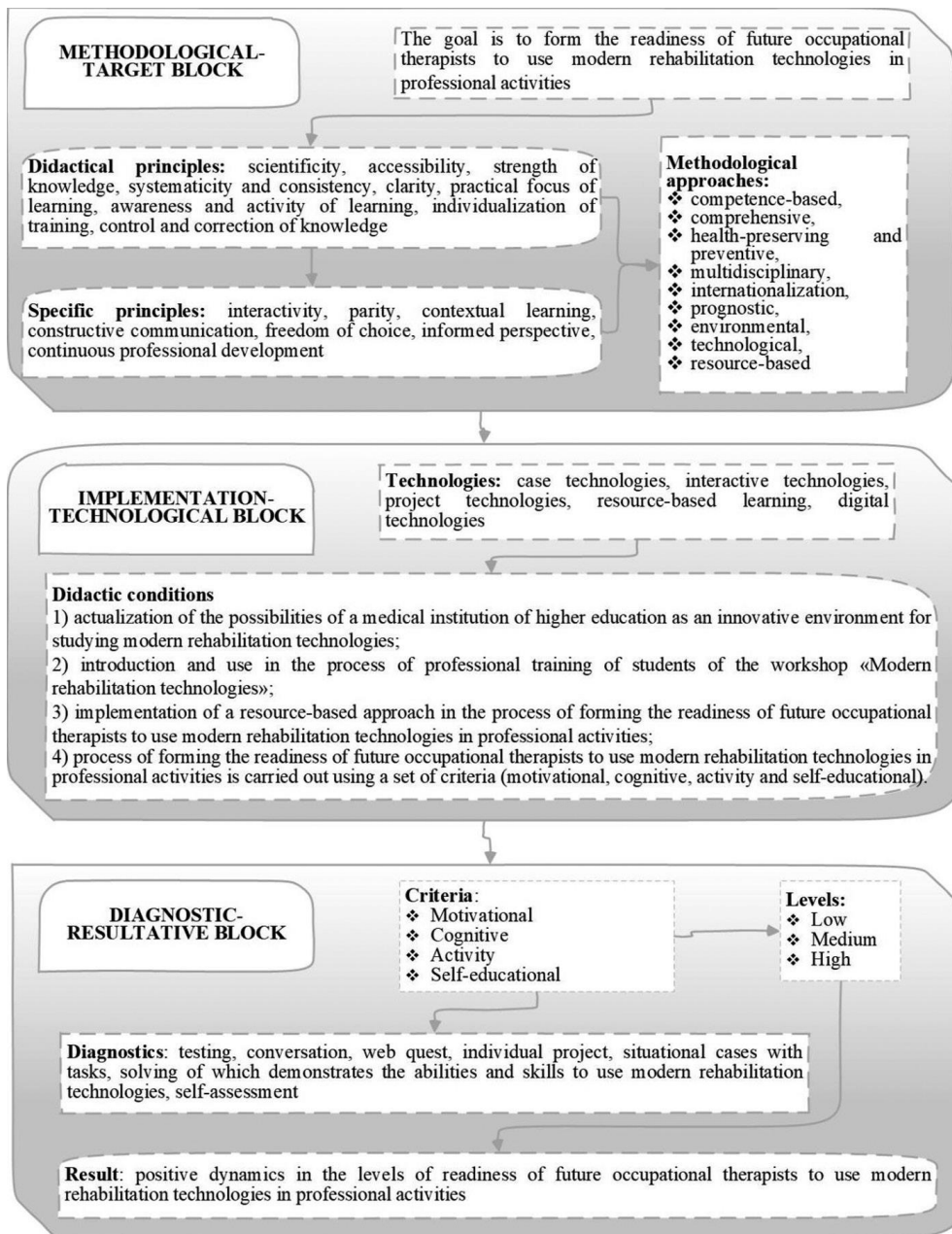


Fig. 1. Model of the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities.

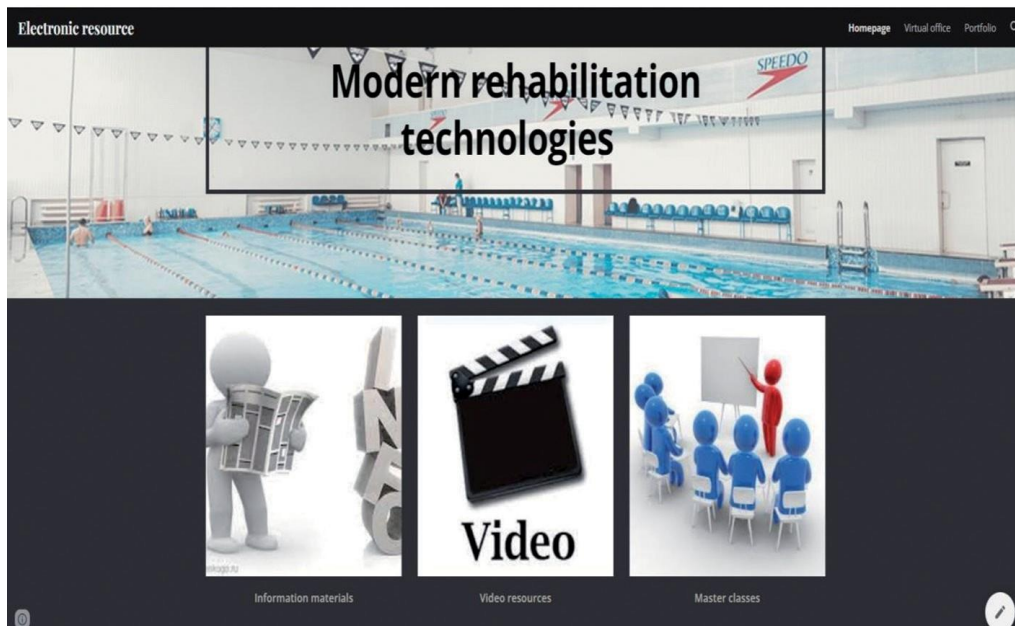


Fig. 2. Electronic resource «Modern rehabilitation technologies».

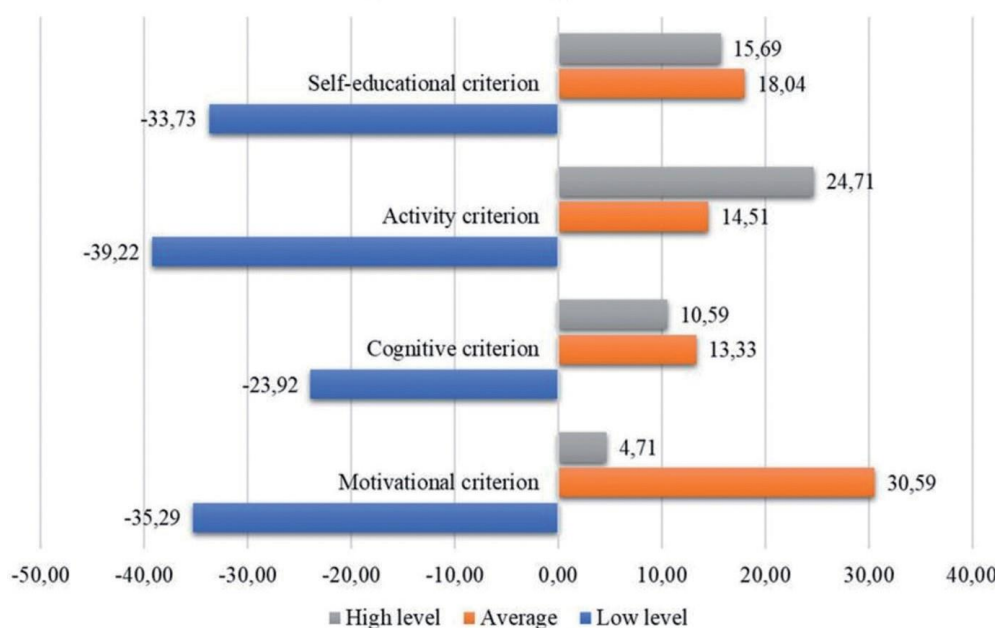


Fig. 3. Dynamics of changes in the levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities (%).

to use modern rehabilitation technologies in professional activities was revealed in: annual work plan; study rooms «Occupational therapy office», author’s pedagogical workshops of the type «Ergotherapy»; technical bases for practice; developed special educational, methodological and informational resources, which provided the traditional and remote educational process, focused directly on the process of training future occupational therapists to use modern rehabilitation technologies in professional activities

(educational and methodological support, electronic resource «Modern rehabilitation technologies» (Fig. 2).

The students also noted the effectiveness of involving practicing dentists in the pedagogical experiment; internship under the guidance of a practicing doctor of physical and rehabilitation medicine on the basis of clinics; conducting thematic master classes, digital technologies in the work of a doctor of physical and rehabilitation medicine; use of project technologies (individual projects such as «SWOT

analysis); use of the portfolio (webportfolio) of the future occupational therapists to use modern rehabilitation technologies in professional activities.

The analysis of the results of the formative experiment, during which students studied according to the implementation program in the system of professional training in a medical institution of higher education under specified didactic conditions, shows positive changes in the levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities. Thus, according to the *motivational criterion*, 24.71% of students demonstrated a high level of readiness, medium - 61.18%, low - 14.12%; according to the *cognitive criterion*, 18.82% of students demonstrated a high level of readiness, medium - 70.20%, low - 10.98%; according to the *activity criterion*, 29.02% of students demonstrated a high level of readiness, medium - 66.27%, low - 4.71%; according to the *self-education criterion*, 25.10% of students demonstrated a high level of readiness, medium - 51.76%, low - 23.14%.

A generalized characteristic of the dynamics of changes in the levels of readiness studied after the experiment is presented in Fig. 3.

The obtained results of the study testify to the effectiveness of the proposed model and didactic conditions for the formation of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities, since the level of formation of indicators of students' readiness criteria acquired positive dynamics.

DISCUSSION

In this regard, it is important to create didactic conditions for effective training of future occupational therapists in domestic medical institutions of higher education. A special role in this process belongs to the formation of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities, as well as the problem of monitoring this process [10, 11].

Analysis of scientific and pedagogical literature shows that there is a powerful scientific arsenal of scientific works on the problems of professional training of future occupational therapists and formation of their professional competencies. However, there is a need to determine and justify the didactic conditions for the formation of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities [12, 13]. In the course of scientific research it has been proven that the following didactic conditions are effective in forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities [14, 15]:

1. Actualization of the possibilities of a medical institution of higher education as an innovative environment for studying modern rehabilitation technologies.
2. Introduction and use in the process of professional training of students of the workshop «Modern rehabilitation technologies».
3. Implementation of a resource-based approach in the process of forming the readiness of future occupational

therapists to use modern rehabilitation technologies in professional activities.

4. Process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities is carried out using a set of criteria (motivational, cognitive, activity and self-educational).

CONCLUSIONS

During the discussion it was noted that the proposed author's model is effective and innovative, because for the first time the didactic conditions for the formation of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities have been defined, substantiated and implemented: actualization of the possibilities of a medical institution of higher education as an innovative environment for studying modern rehabilitation technologies; introduction and use in the process of professional training of students of the workshop «Modern rehabilitation technologies»; implementation of a resource-based approach in the process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities; process of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities is carried out using a set of criteria (motivational, cognitive, activity and self-educational); a model of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities was developed, consisting of *methodological-target, implementation-technological and diagnostic-resultative blocks*; the essence of the concept of «training of future occupational therapists to use modern rehabilitation technologies in professional activities» has been improved, «readiness of future occupational therapists to use modern rehabilitation technologies in professional activities», criteria (motivational, cognitive, activity, self-educational) and levels of readiness of future occupational therapists to use modern rehabilitation technologies in professional activities, diagnostic tools for assessing the level of this readiness.

The practical significance of the obtained results of the experiment was noted, which consists in the development of educational and methodological support for the implementation of didactic conditions of formation of the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities, in particular, the workshop «Modern rehabilitation technologies» and an online platform for its study with digital content, educational and methodological support, of the electronic resource «Modern rehabilitation technologies», criterion-diagnostic apparatus for assessing the level of readiness of the future occupational therapists to use modern rehabilitation technologies in professional activities.

The model proposed by the authors of forming the readiness of future occupational therapists to use modern rehabilitation technologies in professional activities improves the quality of education of occupational therapists and better prepares them for practical activities.

REFERENCES

1. Bergier J, Bergier B, Tsos A. Variations in physical activity of male and female students from the Ukraine in health-promoting life style. *Ann Agric Environ Med.* 2017;24(2):217-221. doi: 10.5604/12321966.1230674.
2. Donchenko VI, Zhamardiy VO, Shkola OM et al. Health-saving Competencies in Physical Education of Students. *Wiad Lek.* 2020;73(1):145-150. PMID:32124825.
3. Robinson LE, Stodden DF, Barnett L. Motor competence and its effect on positive developmental trajectories of health. *Sports Med.* 2015;45(9):1273-1284. doi: 10.1007/s40279-015-0351-6.
4. Zhamardiy V, Shkola O, Tolchieva H, Saienko V. Fitness Technologies in the System of Physical Qualities Development by Young Students. *Journal of Physical Education and Sport (JPES).* 2020;20(1):142-149. doi: 10.7752/jpes.2020.01019.
5. Kornosenko O, Denysovets T, Danysko O et al. System of Preparation of Future Fitness Coaches for Health-Improving Activity in the Conditions of Rehabilitation Establishments. *International Journal of Applied Exercise Physiology (IJAEP).* 2020;9(8):33-40.
6. Kolomoiets H, Rebryna A, Dutchak Y et al. Analysis of health and physical fitness Indicators of modern youth. *Acta Balneol.* 2017;5(171):457-462. doi: 10.36740/ABAL202205114.
7. Peterson NE, Sirard JR, Kulbok PA et al. Sedentary behavior and physical activity of young adult university students. *Res Nurs Health.* 2018;41(1):30-38. doi: 10.1002/nur.21845.
8. Zhamardiy V, Shkola O, Kravchenko I et al. Modern approaches to the formation of professional readiness of future specialists in physical rehabilitation in the context of restoring the health of athletes. *Journal for Educators, Teachers and Trainers (JETT).* 2021;13(1):9-15. doi: 10.47750/jett.2022.13.01.002.
9. Griban G, Prontenko K, Zhamardiy V et al. Professional Stages of a Physical Education Teacher as Determined Using Fitness Technologies. *Journal of Physical Education and Sport (JPES).* 2018;18 (2):565-569. doi: 10.7752/jpes.2018.02082.
10. Mikheienko O, Lianni Y, Tkachenko A et al. Preventive Model of Formation of Health-save Competence of Student Youth with the Use of Natural Physiotherapy. *Acta Balneol.* 2022;5(171):433-438. doi: 10.36740/ABAL202205110.
11. Bland JS. What is the Best Way to Assess Functional Health?: The History of the Development and Application of the Patient Reported Outcome Measurement Information System (PROMIS). *Integr Med (Encinitas).* 2020;19(1):8-11.
12. Prysiazniuk S, Oleniev D, Tiazhyina A et al. Formation of health preserving competence of students of higher educational institutions of information technologies specialties. *International Journal of Applied Exercise Physiology (IJAEP).* 2019;8(3.1):283-292. doi: 10.26655/IJAEP.2019.10.1.
13. Shkola O, Otravenko O, Donchenko V et al. The influence of tae-bo on the development motor potential of students of medical and pedagogical specialties and its efficiency in the process of extracurricular activities. *Wiad Lek.* 2022;75(4 pt 1):865-870. doi: 10.36740/WLek202204121.
14. Tsilimak O, Okhrimenko I, Okhrimenko S et al. Characteristics of volitional qualities of successful students. *International Journal of Applied Exercise Physiology (IJAEP).* 2020;9(12):119-128.
15. Emetc A, Zhamardiy V, Sohokon O, Khyzhniak O. Formation of project competence of future specialists from the field of physical therapy, physical education and sports in the higher education system. *Journal for Educators, Teachers and Trainers (JETT).* 2022;13(2):260-269. doi: 10.47750/jett.2022.13.02.025.

CONFLICT OF INTEREST

The Authors declare no conflict of interest

CORRESPONDING AUTHOR

Valeriy Zhamardiy

Department of Physical and Rehabilitation Medicine
Poltava State Medical University, Poltava, Ukraine
e-mail: Shamardi@ukr.net

ORCID AND CONTRIBUTIONSHIP

Viktoriia Donchenko: 0000-0002-9665-7204 **B C D F**

Valeriy Zhamardiy: 0000-0002-3579-6112 **B C D F**

Olena Shkola: 0000-0003-3013-0423 **A E F**

Olena Fomenko: 0009-0007-2643-9731 **A E F**

Nataliia Khlus: 0000-0001-9860-1047 **A E F**

Olena Kabatska: 0000-0001-7984-7391 **A E F**

Alla Heta: 0000-0001-7031-5188 **A E F**

A –Work concept and design, **B** –Data collection and analysis, **C** –Responsibility for statistical analysis, **D** –Writing the article, **E** –Critical review, **F** –Final approval of the article

RECEIVED: 05.09.2024

ACCEPTED: 28.10.2024

