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# PRE-CONDITIONS AND MODERN DEVELOPMENT OF SPECIALITIES IN PHYSICAL THERAPY AND ERGO-THERAPY IN UKRAINE

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#### Abstract

**Topicality.** The crisis situation of the state of Ukrainian population health lifts the level of rehabilitation of patients and persons with disability to the priority national problem. The state of rehabilitation services grant substantially depends on the skilled personnel providing. **Research aim:** on the basis of analysis of scientifically-methodical literature and normatively legal acts to investigate pre-conditions and modern trends of progress of physical therapy and occupational therapy specialities in Ukraine. **Research results.** The educational programs of specialists preparation on a physical rehabilitation have many defects, and preparation of specialists on occupational therapy is absent in our country absolutely. In accordance with normative acts physical therapy is the legal successor of physical rehabilitation in our country, but these concepts are not identical. The intensive process of forming of new specialities, criterias of accreditation, educational programs of retraining passes in Ukraine. **Conclusions.** Change of legal bases in the sphere of preparation and labour of physical therapeutists and ergotherapeutists, design of educational programs in accordance with international standards, is the first step on a way to quality development of these fields of knowledge and practice.

**Key words:** physical therapy, ergo-therapy (occupational therapy), staff training.

Евгеній Імас, Олена Лазарева. Передумови та сучасний стан розвитку спеціальностей «Фізична терапія» й «Ерготерапія» в Україні. Актуальність. Кризова ситуація стану здоров'я населення України піднімає рівень реабілітації хворих та осіб з інвалідністю до пріоритетної загальнодержавної проблеми. Стан надання реабілітаційних послуг суттєво залежить від кадрового забезпечення. Мета дослідження— на основі аналізу науково-методичної літератури та нормативно-правових актів дослідити передумови й сучасні тенденції розвитку спеціальностей «Фізична терапія» та «Ерготерапія» в Україні. Результати роботи. Установлено, що навчальні програми підготовки фахівців із фізичної реабілітації мають багато недоліків, а підготовка спеціалістів з ерготерапії відсутня в нашій країні. Відповідно до нормативних актів, фізична терапія— правонаступниця фізичної реабілітації в Україні, але ці поняття не є тотожними. У державі відбувається інтенсивний процес формування нових спеціальностей, критеріїв акредитації, навчальних програм перепідготовки. Висновки. Зміна юридичних основ у сфері підготовки й праці фізичних терапевтів та ерготерапевтів, розробка навчальних програм відповідно до міжнародних стандартів— перший крок на шляху до якісного розвитку цих галузей знань і практики.

Ключові слова: фізична терапія, ерготерапія, підготовка кадрів.

Евгений Имас, Елена Лазарева. Предпосылки и современное состояние развития специальностей «Физическая терапия» и «Эрготерапия» в Украине. Актуальность. Кризисная ситуация в состоянии здоровья населения Украины поднимает уровень реабилитации больных и лиц с инвалидностью на уровень приоритетной общегосударственной проблемы. Состояние предоставления реабилитационных услуг существенно зависит от кадрового обеспечения. Иель исследовать предпосылки и современные тенденции развития специальностей «Физическая терапия» и «Эрготерапия» в Украине. Результаты работы. Установлено, что учебные программы подготовки специалистов по физической реабилитации имеют много недостатков, а подготовка специалистов по эрготерапии в нашей стране отсутствует. Согласно нормативным актам физическая терапия является правопреемником физической реабилитации в Украине, но эти понятия не есть тождественными. В государстве проходит интенсивный процесс формирования новых специальностей, критериев аккредитации, учебных программ переподготовки. Выводы. Изменение юридических основ в сфере подготовки и труда физических терапевтов и эрготерапевтов, разработка учебных программ соответственно международным стандартам является первым шагом на пути к качественному развитию этих отраслей знаний и практики.

Ключевые слова: физическая терапия, эрготерапия, подготовка кадров.

**Introduction.** In nowadays the rehabilitation of patients and persons with disability in Ukraine acquires the level of priority national problem in connection with a crisis situation that has consisted of health state of population and that gets worse as a result of distribution of chronic nonspecific diseases. Also there is an urgent requirement in rehabilitation measures for persons that suffered during realization of ATO [3].

The committee of experts of World Health Organization (WHO) (in 1980) gave determination to the rehabilitation as an active process the aim of that is an achievement of complete renewal of broken because of disease or trauma of functions, or, if it is impossible is optimal realization of physical, psychical and social potential of person with disability, it's the most adequate integration in society [1, 5].

Among other methods of restoration influence, a rehabilitation occupies the special place, because examines not only the state of organs and systems of organism, but also functional possibilities of person in her everyday life after an extract from medical establishment [5].

As one of leading principles of rehabilitation there is a complexity of influences, the rehabilitation establishments, which are only those establishments that provide a complex of medical and social, physical and professionally-pedagogical measures[5], also modern realized protocols and multi disciplinary brigades consist of the doctor of physical rehabilitation medicine, physical therapeutist, ergotherapeutist, logotherapeutist, psychotherapist and social worker and other, taking into account the necessities of patient [7]. For realization of all these directions, corresponding material and technical provision and staff provision of rehabilitation establishments have an important value [5].

At the analysis of the modern state of rehabilitation services in Ukraine it was specified the staff problem as the most important. Determination of basic tendencies of preparations of specialists, that render rehabilitation services is extremely actual and needs a wide discussion and unification.

**Research aim** is to investigate pre-conditions and modern tendencies development of specialties on physical therapy and occupational therapy in Ukraine on the basis of analysis of scientifically-methodical literature and normatively legal acts.

Results of the Study. Discussion. In Ukraine about 25 years on the base of institutes of physical culture and pedagogical universities have been done preparation of specialists on physical rehabilitation. For today in Ukraine there are more than 50 educational establishments that graduate bachelors and master's degrees in the field of physical rehabilitation. Unfortunately, in most of them, the training programs are extremely distant from world standards. Majority of establishments does not have bases of practical preparation. There are only a few institutions that have the educational program close to recommended WCPT and sufficient amount of hours of clinical practice. Without regard to knowledge of autopsy and physiologic peculiarities of human organism, insufficient study of biomechanics and kinesiology, the knowledge of that plays a leading role in testing of the muscles state of patient and construction of physical rehabilitation program and absence of practical experience with patients can not provide the sufficient level of preparation.

M. L. Ankin, physician-in-chief of KRCH «Kyiv Regional Clinical Hospital» establishes, that educational programs of specialists preparation have many defects, in particular, become antiquated and don't contain modern methodologies of such, as Proprioceptive Neuro Muscles Facilitation (PNF-therapy), Bobat-Treatment and others.

Absence of training establishments and centers of preparation does impossible further professional development. All specialized courses of preparation have only general character and in no way assist the increase of grant help in area of Rehabilitology. Except that, removed from the necessities of medical establishments, bad imagination about necessary for further labour of competence results in absolute unadapted of most graduate specialists of this sphere for work in the conditions of hospital, and doctors – uninformed in relation to possibility of collaboration with them.

In recent years, the higher medical educational establishments began interest in preparation of doctors in Physical Rehabilitation. So, the first set of students for education was carried out in I. Y. Horbachevskyi State Medical University in Ternopil in 2012 [4]. In 2015–2016 other medical institutions of Kharkiv, Kyiv joined to them. Unfortunately, the departments of Medical Physical Education and Sporting Medicine can not give an approximately those knowledge that world society demand in process of preparation of Physical Therapy specialists. Educational process in medical establishments for long years was based on out-of-date knowledge, informing character by a volume 60–80 hours.

Modern world educational programs for «Physical Therapy» envisage the study of biological, medical, pedagogical (inclusive with the theory of physical education) and special disciplines. A study of medical pathology is only part of preparation. At the same time, the presence of the so-called «medical» education for a doctor, medical assistant or medical sister will not be able to compensate absence of the special education [2].

Preparation of specialists on occupational therapy is absent in our country quite. Today in Ukraine there are only 3 certificated specialists on occupational therapy that passed training courses and got a degree in other countries.

For the decision of this problem in accordance with resolution of Cabinet of Ministers of Ukraine from April, 29, 2015 № 266 «About approval of list of knowledge and specialties areas after that preparation of entrants of higher education»[11] preparation of specialists after the educationally-qualifying levels of bachelor (direction of preparation «Human Health»), specialist degree and master's degree (Speciality of «Physical Rehabilitation»), that were included in the area of knowledge 0102 «Physical Education, Sport and Human Health», was attributed to the area of Health Protection for Speciality 227 of «Physical Rehabilitation»).

By Resolution of Cabinet of Ministers of Ukraine from February, 01, 2017 № 53 [10] were made alterations to the list of specialities in the fields of Health Protection. The change of Speciality title 227 «Physical Rehabilitation» on Speciality 227 «Physical Therapy, Occupational Therapy» took place.

The necessity of development of specialities as «Occupational Therapy» and «Physical Therapy» in Ukraine was repeatedly underlined, by both the representatives of Ministries and Departments accountable for development of Health Protection sphere in Ukraine and international experts. The Ministry of Healthcare of Ukraine (MHU) already undertakes certain steps for this purpose. So in August, 2016 new specialities were added to the classifier of professions: doctor of Physical and Rehabilitation Medicine, Ergotherapeutist and Physical therapeutist [8], afterwards, in November their professional descriptions were published [9], what give an opportunity to place in a job these specialists to health protection establishments.

The new professional titles «Ergo-therapy» and «Ergo-therapeutist» were accepted, as the Ukrainian equivalent of terms «Occupation Therapy» «Occupational Therapist», and the «Physical therapeutist» and «Physical therapy» for a mess will not arise out of present medical Speciality «Doctor-Physical therapeutist».

Physical therapy is a legal successor of Physical rehabilitation in our country, but these concepts are not identical. Physical therapy (syn. Physiotherapy) is the «profession of health protection sphere, related to strengthening of health, prevention of physical disability, estimation of the state and rehabilitation of patients with a pain syndrome, illness or trauma, and by treatment with application of physical therapeutic facilities and without application of medicamental, surgical or radiological facilities», or «use of physical facilities and methods, such as a massage and manipulations, therapeutic exercises, hydropathy and different forms of energy, in a rehabilitation and proceeding in a normal corporal function after a disease or trauma» [2, 12].

Physical therapeutist are often named specialists in area of motion. The duties of such specialist are:

- an estimation of the functional state of patient/of client and their environment;
- the determination of interference aims;
- the planning of interference;
- a choice of concrete methods and receptions of interference from the present in its arsenal the physical methods of influence;
  - independent realization of the program;
- an estimation of changes in the state of patient/client, that took place during interference, that is the conduction of the repeated estimation during the realization of the program;
  - an estimation of efficiency of interference;
  - selection and adaptation of necessary auxiliary facilities and special equipment;
- education of persons, that look after or help a patient/client of the necessary receptions of help and correct using of the special equipment.

For future ergotherapeutists it is necessary more in detail to know ergonomics and that, how people execute those or other types of activity, except it, they are guilty able to make the simplest adaptations for people with the different types of violations. Today, Ergo—therapy is the speciality that is base on the scientifically well – proven facts that purposeful, that has for an individ, activity helps to improve functional possibilities (physical capacity, emotional, cognitive, psychical) [6].

The Ergo-therapy aims are:

- to educe present violations, renew or develop functional possibilities of individ, that need to them in everyday life (in activity);
- to help an individ with limitations of vital functions to become maximally independent in everyday life by proceeding (development) in their lost functions, use of the special adaptations, and also adaptation of environment;
- to create optimal terms for development and individual self-realization with limit functional possibilities through their «employment» in the different spheres of vital functions and, in an eventual account, to improve their life quality.

All these changes gave a push for the input of the new educational and educationally-scientific programs at the universities. Now a working group of the Ministry of Education and Science of Ukraine (MESU) has worked out standard for preparation of bachelors on Physical therapy and Ergo-therapy and the first set of students took place. Standards are developed for the second and third educational levels. Preparation of «Ergo-therapeutists» and «Physical therapeutists» is expedient to continue at the universities that have a scientifically-methodical base and twenty-year experience of preparation of specialists on a Physical rehabilitation and programs with world's standards. It is gradually necessary to bring over to preparation the medical higher educational establishments and to reduce the amount of educational establishments that give off-grade education.

At the same time, taking into account discipling and recommendations of World Confederation on Physical Therapy and World Federation of Ergo-therapeutists (with that MHC of Ukraine signed a memorandum about a collaboration) preparation of Physical therapeutists and Ergo-therapeutists at the Bachelor's degree level is planned together, then preparation at the Master degree level is desirable to divide with the aim of observance of world educational requirements.

An issue about the skilled providing of departments that will prepare such specialists is separately examined.

Participants of the Ukrainian Scientifically-Methodical Conference on issue of licensing and introduction of Speciality 227 «Physical therapy, Ergo-therapy» that took place in the National University of Physical Education and Sport of Ukraine on February, 20 in 2017, marked a necessity:

- -to confirm at the level of «Order, officially listed in MHC» for Speciality of 227 «Physical therapy, Ergo-therapy» of such specializations: «227.01 Physical therapy» and «227.02 Ergo-therapy» for the applicants of higher education of Master's degree with the aim of the effective forming and placing the government order, preparation to different professional activity of corresponding specialists, and also for development of standard of higher education for the indicated Speciality that will include the independent lists of special (professional, subject) competences and results of studies for each of specialization, realization of the differentiated licensing of corresponding educational activity in the part of content of staff, material and technical providing preparation.
- to admit the graduate specialists of Speciality 8.01020302 the «Physical Rehabilitation» and «24.00.03 Physical Rehabilitation» such that can provide normative content of preparation of higher education applicants on professional disciplines for Specialization «227.01 Physical therapy» and «227.02 Physical therapy, Ergo-therapy».
- to admit the graduate specialists of Specialities 8.01020302 the «Physical Rehabilitation», 8.01010401 «Correction education (after nosologies)», «24.00.03 Physical Rehabilitation», «13.00.03 Correction education» such that can provide normative content of higher education applicants preparation on professional disciplines for specialization «227.02 Ergo-therapy» of Speciality «227 Physical therapy, Ergo-therapy».

Nowadays there is a project of employment of present graduating students in clinical and rehabilitation establishments of MHC at the terms of the further retraining and increase of their qualification. Specialists of WHO on results the estimation of situation in the field of rehabilitation in Ukraine, consider necessary development of criteria of accreditation, educational programs of retraining and transition plan for the existent professionals of rehabilitation according to principle, «taking better» from international models (for example development of educational programs for the doctors of physical and rehabilitation medicine in accordance with the standards of European Council for Physical and Rehabilitation Medicine, and programs for Physical therapeutics and Ergo-therapeutics in accordance with modern requirements and recommendations of international professional organizations (WCPT, WFOT).

The unsolved problem is realization of valuable clinical practice of Physical Therapy and Ergo-Therapy and necessity for development only test of estimation of theoretical knowledge and practical skills of future specialists (STEP – by professional aspiration). Subject of discussion is the requirements to accreditation of educational establishments that prepare the marked specialists. One of the major points of accreditation is clinical practice.

For providing of clinical practices, the amount hours of clinical preparation (1000–1500 hours for all period of preparation) and norms in relation to the presence of agreements on a collaboration between higher educational and clinical establishments are indicated in the standards of higher education. Presence in the staff of the marked clinical establishments of specialists on a Physical Rehabilitation or Curative Physical

Culture and Physiatrists, and afterwards Physical therapeutics and Ergo-therapeutics with whom a signed labor contracts are obligatory. The amount of agreements and power of clinical establishments must provide the visit of practice by group of students with 5–6 persons per on one specialist on a Physical Rehabilitation or Curative Physical Culture.

All of it creates new calls for training of scientifically-pedagogical staff of universities, arrangement of students clinical practice bases, introduction of university clinics.

Conclusions. Taking into account the modern state of problem of Physical Therapy and Ergo-therapy, there is a necessity of preparation of specialists programs in accordance with world standarts with quality practical preparation in clinics. The specialized courses of disciplines that will examine and bind the human anatomical and physiological features of Physical Therapy and Ergo-therapy must go out in the first positions. Graduating students must be adapted for a work in curative establishments, in the content of patient-oriented multi-disciplinary command.

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