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DEVELOPING A NEW QUALIFIED OCCUPATIONAL THERAPY PROGRAM IN UKRAINE: A NEEDS ASSESSMENT

Abstract. Topicality. Assessment of the needs of stakeholders involved in the creation of a new educational program “Erotherapy”.

Purpose and task. A needs assessment in Developing a new qualified occupational therapy program in Ukraine.

Materials and methods. The research was conducted using questionnaires and written interviews. The respondents in the study were 180 students majoring in “Physical Therapy, Occupational Therapy” at three universities and 40 stakeholders in potential occupational therapy jobs. Research results were analyzed using descriptive statistics and case studies.

Results results. Most students have found that occupational therapy is associated with physical therapy. Important for the success of the occupational therapist profession in Ukraine, students consider: skills of interaction with others, knowledge of “occupational therapy methods”, “related sciences” and “human nature”, “positive attitude towards people with disabilities”. Students prefer to work with people with physical disabilities. 99% of students emphasize the importance of acquiring practical skills during classroom practical classes, 91% – during practice. The decisive factors in choosing the profession of occupational therapist are: intrinsic motivation, desire to care for people, public awareness of occupational therapy. The stakeholder survey identified three topics: dissatisfaction with the existing health care and rehabilitation system; the need to raise public awareness of occupational therapy; the need for evidence-based training in occupational therapy.

Conclusions. According to the results of the study, we have identified three aspects that need to be considered when developing and implementing a new educational program in occupational therapy within the UKROTHE project: the need for practice-oriented education; the need to raise awareness and information exchange on occupational therapy in Ukraine; the possibility of expanding the focus of occupational therapy in Ukraine, which is still inspired by the medical model of rehabilitation.

Key words: occupational therapy study program, profession of occupational therapist, needs assessment, questionnaire study, interview study.

Пілізер Ш., Денольф А.-М., Шиллеверт Ш., Закаляк Н. Р., Фігура О. А., Чопик Р. В., Рокутов С. В., Афанасьєва О. С., Базильчук О. В. Розробка нової кваліфікованої програми ерготерапії в Україні: оцінка потреб

Анотація. Оцінка потреб зацікавлених сторін, залучених до створення нової освітньої програми «Ерготерапія», є дуже актуальною.

Мета і завдання – оцінка потреб у розробці нової кваліфікованої програми ерготерапії в Україні.

Матеріали та методи. Дослідження проводилося з використанням анкетування та письмового інтерв'ю. Респондентами у дослідженні були 180 студентів спеціальності «Фізична терапія, ерготерапія» трьох університетів та 40 стейкхолдерів потенційних робочих місць з ерготерапії. Результати дослідження були опрацьовані за допомогою описової статистики та тематичних аналізів.

Результати дослідження. Встановлено, що більшість студентів пов'язує ерготерапію з фізичною терапією. Важливим для успіху професії ерготерапевта в Україні студенти вважають таке: навички взаємодії, знання методів ерготерапії, суміжних наук та природи людини, позитивне ставлення до людей з обмеженнями. Студенти надають перевагу роботі з особами із порушеннями фізичного здоров'я. 99% студентів підкреслює важливість набуття практичних навичок під час аудиторних практичних занять, 91% – під час практики. Вирішальними у виборі професії ерготерапевта є: внутрішня мотивація, бажання піклуватися про людей, обізнаність громадськості про ерготерапію. Опитування стейкхолдерів виявило три теми: незадоволення наявною системою охорони здоров'я та реабілітації; необхідність підвищення обізнаності громадськості з ерготерапією; необхідність навчання, заснованого на доказах ерготерапії.

Висновки. За результатами дослідження ми виділили три аспекти, які потрібно враховувати під час розробки та впровадження нової освітньої програми з ерготерапії в рамках проєкту UKROTHE. Йдеться про потребу в освіті, орієнтованій на практику, потребу у підвищенні обізнаності та обміні інформацією з ерготерапії в Україні, а також можливість розширення фокусу ерготерапії в Україні, яка все ще інспірується медичною моделлю реабілітації.

Ключові слова: навчальна програма з ерготерапії, професія ерготерапевта, оцінка потреб, анкетування, опитування.

Introduction. Although Ukraine has gained its independence from the Soviet Union in 1991, the national organization of the Ukrainian health and rehabilitation system originated in the Soviet times and has since then mainly been influenced by the medical model [1]. This medical model considers

illness or disability as a “problem” of an individual that needs to be cured by means of medicine. Individuals with disabilities are merely seen as passive recipients of the treatment that should preferably be prescribed by medical practitioners [2]. Therefore, rehabilitation in Ukraine tends to mainly consist of

passive activities such as massages, balneotherapy or aromatherapy, which are delivered in sanatoria or health resorts [3].

However, during the last few decades, other European countries have abandoned this medical model to organize their healthcare and rehabilitation programs. Instead, they have adopted a biopsychosocial model, which is the internationally accepted conceptual framework for health and disability of the World Health Organization [4]. This biopsychosocial discourse considers disability not solely as a medical condition but as a dynamic interaction between this medical condition, environmental, and personal factors [2]. This broader approach implies a shift in the focus of rehabilitation toward preserving individuals' quality of life by enhancing daily activities performance and social participation [5].

As outlined above, the definition of disability and ways of thinking about rehabilitation in Ukraine do not coincide with the internationally accepted and evidence-based guidelines proposed by the WHO. Therefore, the government of Ukraine decided to implement the principles of the WHO Global Disability Action Plan [6]. To support the development of such a National Disability, Health and Rehabilitation Plan for Ukraine, in 2015, a Rehabilitation Advisory Team of the International Society of Physical and Rehabilitation Medicine carried out an assessment of the situation of people with disabilities and the rehabilitation system in Ukraine [2; 7].

One of the major concerns emerging from this assessment is that the rehabilitation workforce does not meet international standards, due to different curricula and accreditation criteria and a lack of capacity [7]. A striking example hereof relates to the profession of Occupational Therapy in Ukraine (where it is often referred to as Ergotherapy). In 2016, occupational therapy has been recognized as a profession in Ukraine, and since then, several universities over the country offer joint bachelor degrees in physical therapy and occupational therapy/ergotherapy. However, none of them seems to be equipped with the knowledge, resources and curriculum to accurately teach the integrity of the profession and meet the World Federation of Occupational Therapists (WFOT) Minimum Standards for the Education of Occupational Therapists [8]. In 2020 the first educational program in OT approved by WFOT is established in Kyiv National University on Physical Education and Sport of Ukraine. Consequently, an increasing number of professionals work as occupational therapists but often lack the necessary training and a clear understanding of evidence-based practices of occupational therapy. Nevertheless, the need for well-trained occu-

pational therapists in Ukraine is high, as a substantial amount of the Ukrainian population is facing physical, mental or social challenges that are only exacerbated by the armed conflict in the eastern part of the country [3; 8].

Aiming to overcome this gap, Ukraine strives for collaboration with international partners to receive support in the establishment of an internationally approved curriculum for occupational therapy in Ukraine [7; 8]. An example of this trend for international collaboration is the EU funded Erasmus+ Project UKROTHE. UKROTHE is a capacity building project in which three Ukrainian higher education institutions (i.e., Drohobych Ivan Franko State Pedagogical University (DSPU), Khmelnytsky National University (KNU), and Prydniprovsk State Academy of Physical Culture and Sport (PSAPC)) will work intensively with European program countries (i.e., Belgium, Portugal and Spain) to develop and implement an occupational therapy curriculum that not only meets international standards but also takes into account the specific needs of the country, by consulting ENOTHE, WFOT and USET.

The aim and tasks. This article presents the main findings of the first phase of this project, which involved a needs assessment. The goal of this needs assessment was twofold. First, it allowed us to gain insight into the ideas and needs of the parties that will be involved in the rollout of the new curriculum: students, future possible workplaces for occupational therapy and government stakeholders. Additionally, by involving workplaces and government in the early phase of curriculum development, we strived to ensure that the qualifications of the new occupational therapy students will be recognized by the government and future workplaces once the students are graduated.

Methods of research. The needs assessment consisted of two studies: a questionnaire study targeting students' opinions and an interview study with occupational therapy workplaces and other (government) stakeholders. Combining both quantitative and qualitative research methods in this mixed-methods design allowed us to make a thorough analysis of the situation in Ukraine concerning the current view of disability, the strengths and needs of healthcare and rehabilitation in the country, and perceptions on the current education programs in the field of physical therapy and/or occupational therapy.

Questionnaire study

Sample. The sample included a total of 180 students and consisted of 85 male students (47%) and 95 female students (53%). Students' mean age was 20 years (SD = 3.63; range: 17–41). Almost all stu-

dents ($n = 174$; 97%) were bachelor students in the specialty 'Physical therapy, occupational therapy'. The other students studied "Physical revalidation", however, no significant differences were found between the responses of these two groups of students, so no further distinction is made. From each Ukrainian higher education institution involved in the UKROTHE project, approximately the same number of students participated. More concretely, of the total sample of 180 students, 59 students studied at DSPU (33%), 65 studied at KNU (36%), and 56 studied at PSAPC (31%).

Instrument. An online questionnaire was used. Besides demographic questions, the questionnaire consisted of six broad question topics. The first three questions focused on occupational therapy as a profession whereas the latter questions' topics were related to occupational therapy and education. More specifically, the first question quantified the extent to which students agreed that descriptions such as "caring for injured people" or "helping disabled people to participate in everyday activities" captured the essence of occupational therapy. Second, students had to rate the importance of certain characteristics to be a successful occupational therapist in Ukraine. The third question concerned their career preference and their opinions on specific target audiences' needs in Ukraine.

In the following questions, students were asked about the relevance and importance of particular content in the new curriculum (question 4), their opinion on possible influential factors in the choice to study occupational therapy (question 5), and finally, their experience with specific teaching methods (question 6). Almost all questions could be answered by rating a number on a Likert scale ranging from 1 (not at all) to 4 (very).

Procedure and analysis. The three Ukrainian higher education institutions (i.e., DSPU, KNU, and PSAPC) were responsible to recruit students who were currently studying occupational therapy or programs related to occupational therapy. During class, teachers involved in these programs invited students to participate in the questionnaire study that aimed to inform the development of a new and qualified occupational therapy curriculum in Ukraine. After this general information, the teachers distributed the hyperlink via which students could complete the questionnaire. Students were informed through the informed consent form on the purpose of the purpose of the questionnaire and on the possibility to withdraw their participation at any time without an impact on their study course. Confidentiality was ensured to encourage honest responses. After providing their

informed consent, students took approximately 15 minutes to complete the questionnaire.

The completed questionnaires were analyzed using the statistical program SPSS. Because the needs assessment aims to explore students' opinions on the profession of occupational therapy and occupational therapy education in Ukraine, the data was analyzed with a descriptive focus, mainly using absolute and relative frequencies.

Interview study

Sample. A total of 40 stakeholders in possible occupational therapy workplaces were interviewed. Faculty members of DSPU and PSAPC conducted 15 interviews each, KNU faculty members conducted an additional 10 interviews. Stakeholders were able to participate if they had professional experience of working with individuals with disabilities in Ukraine. The overall sample consisted of 18 men and 22 women; the mean age was 37 years. Employees in both public ($n = 21$) and private ($n = 19$) organizations were included. Examples of public organizations are city hospitals, inclusive resource centers or state institutions. The private organizations in our sample consisted largely of centers for (physical) rehabilitation. The most frequently mentioned professions were physical therapist/occupational therapists ($n = 19$) and medical doctors with different specializations who were often the director of a specific organization ($n = 11$).

Instrument. At the first project meeting, the team discussed the interview guide extensively to ensure that interviews would be conducted systematically by different involved interviewers. This interview guide consisted of five parts. All interviews started with introducing the goal of the UKROTHE project in general and the interview in particular. Demographic questions were asked as icebreakers and in order to be able to describe the sample. The following questions aimed to understand the context in which the participant was working. Third, questions concerned participants' opinions on the prevailing view of humanity in Ukraine and the Ukrainian healthcare and rehabilitation system. The fourth group of questions focused on the current understanding of occupational therapy and how they believed the new curriculum occupational therapy should look like. Finally, to conclude, we asked about what they thought was essential to successfully implement this new occupational therapy program.

Procedure and analysis. The three Ukrainian higher institutions conducted the interviews with relevant workplaces or stakeholders in their region. Convenience sampling techniques were used: all partners invited their contacts in the working field to

a semi-structured interview about their opinions on the current Ukrainian healthcare and rehabilitation system and the possibilities of a new occupational therapy program. The interviews were conducted in Ukrainian and lasted 25 to 45 minutes. As described above, the interviews consisted of five groups of open-ended questions. When necessary, probes were used to facilitate participants' answers. All interviews were audio-recorded. The interviews were transcribed using a summary report, which aimed to capture the essence of the answers to all topics discussed. These summary reports were translated into English and served as the raw data of the thematic analyses.

Thereafter, three thematic analyses were conducted [8], one for the interviews of each involved Ukrainian higher education institution. After assigning codes that described the content to the data, we searched for patterns or themes in these codes across the different interviews. That way, we defined themes for every Ukrainian higher education institution. In a next step, an overarching thematic analysis was conducted, in which we compared the three groups of themes and came to broader categories. These broader categories will be discussed in the results section of this paper.

Results of research.

Questionnaire Study

1. Students' perceptions of occupational therapy as a profession.

Figure 1 shows that, of all statements, the statement "helping disabled people participate in everyday activities" was the one most students

(96%) perceived to capture the essence of what occupational therapy means. Likewise, almost all students (93%) agreed to varying extents with the statements "rehabilitating people who have had accidents" and "optimizing people's abilities" as definitions of occupational therapy. The vast majority of students (81%) disagreed that occupational therapy was about finding the right medication. Students had more varying opinions on whether the other statements were accurate descriptions of the meaning and goal of occupational therapy. Overall, Figure 1 indicates an appropriate understanding of occupational therapy among Ukrainian students yet with an underlying tendency toward perceiving occupational therapy as mostly related to physical rehabilitation.

Furthermore, four categories of characteristics that the vast majority of students (more than 90%) perceived as (very) important to being a successful occupational therapist in Ukraine were identified.

- Skills related to interacting with other people (i.e., "social skills", "communication skills", "the ability to gain respect and confidence of clients");
- Skills related to analyzing and understanding human behavior such as "problem-solving skills" and "the ability to analyze a situation";
- Knowledge "of occupational therapy methods", "related sciences", and "human nature";
- Attitudes such as "dedicated to help people", "positive attitudes toward people with a disability", "self-awareness" and "honesty and integrity".

On the contrary, the majority of students considered individual characteristics such as gender

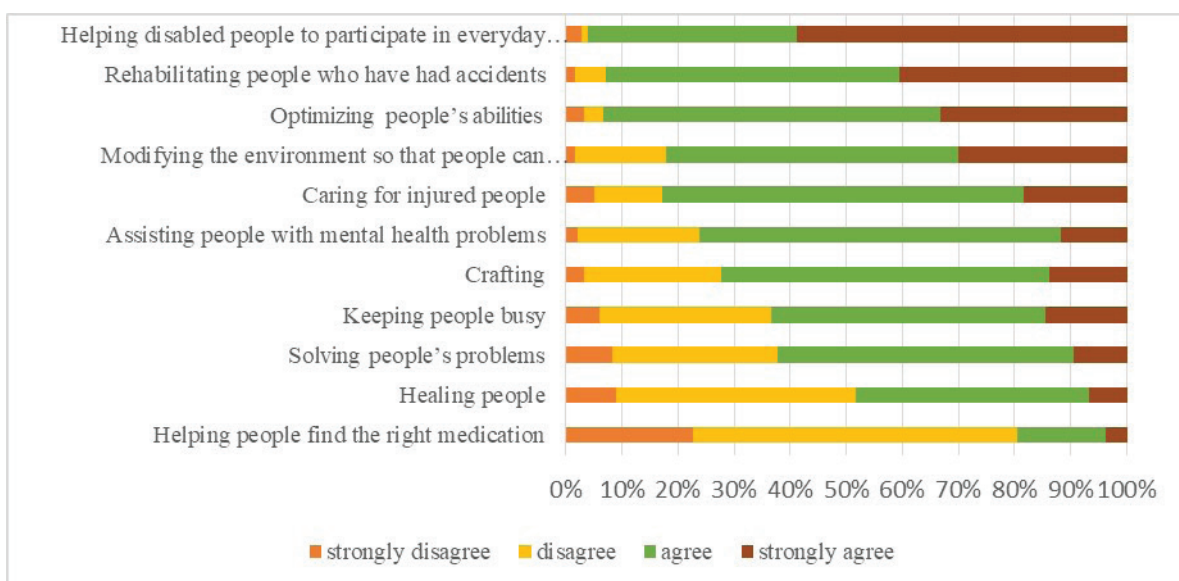


Figure 1. Students' perceptions of occupational therapy

(84%), being religious (82%) and having political awareness (72%) as not (at all) important.

Figure 2 and Figure 3 show students' preferences to work with typical target audiences and students' perceptions of the extent to which these target audiences would benefit from qualified occupational therapists in Ukraine respectively.

Figure 2 clearly demonstrates that students preferred to work with individuals with mainly physical disabilities. The least popular target audience were individuals with mental health problems and individuals with intellectual disabilities. Figure 3

shows that, according to these students, all target audiences would benefit substantially from qualified occupational therapists in Ukraine. Individuals with mainly physical disabilities are perceived as those who would benefit the most. Interestingly, whereas only 18% "very much" preferred to work with individuals with mainly intellectual disabilities, almost 40% agreed that these people would "very much" benefit from qualified occupational therapists. Accordingly, only 25% "very much" preferred to work with elderly but, at the same time, more than the majority of these students agreed that elderly would

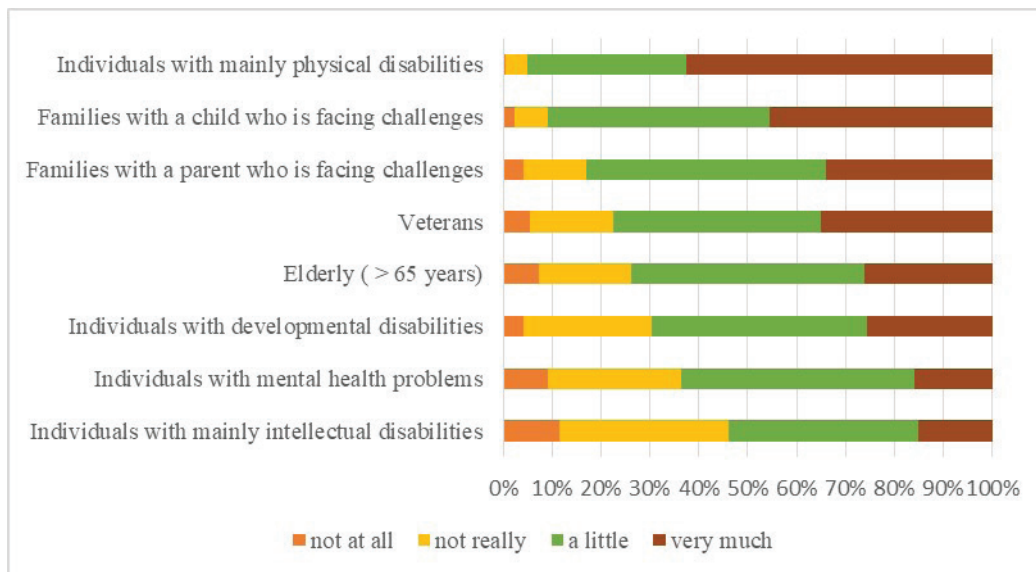


Figure 2. Percentage of students preferring to work with specific target audiences

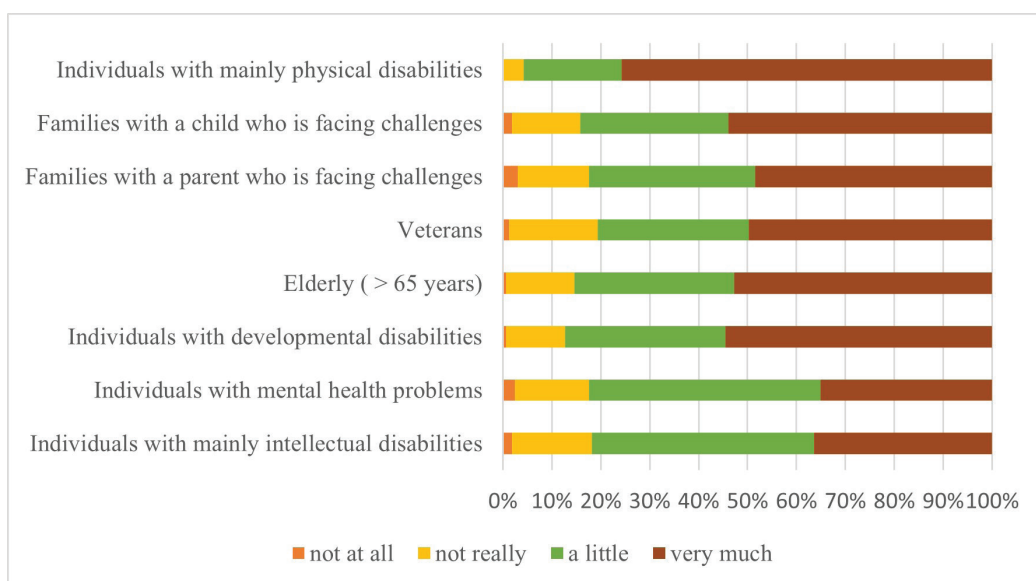


Figure 3. Percentage of students who perceive benefits of qualified occupational therapists in Ukraine for specific target audiences

“very much” benefit from qualified occupational therapists in Ukraine.

These results confirm students’ focus on the physical aspect of health and rehabilitation, probably because the participating students are most familiar with this area of expertise. At the same time, the results invite us to consider how to motivate students to work with other target audiences of whom students do agree that these target audiences would significantly benefit from qualified occupational therapists in Ukraine.

2. Students’ perceptions of occupational therapy and education

When students were asked about their opinions on the content of the new curriculum occupational therapy, two categories of courses appeared to be essential to these students: a theoretical component and a practical component. More specifically, students rated a theoretical foundation of occupational therapy as important (42%) or very important (57%) to be included in the curriculum. Likewise, courses on biology and psychology were also considered important (29% and 46% respectively) or very important (69% and 49% respectively). Regarding the practical component, almost all students agreed on the importance of including sufficient practical skills training such as activities and exercises in the classroom (99%) and practical training in the work field or internships (91%).

Next, Figure 4 shows the perceived importance of influential factors in students’ choice to become an occupational therapist.

We identified three clusters of factors that may influence students’ study choice.

- Students’ internal motivation, or more specifically, their desire to care for people.

- State recognition of occupational therapy. That is, students identified job and salary certainty as (very) important (97% and 94% respectively). The vast majority also emphasized that gaining recognition of occupational therapy by the government is important (53%) or very important (40%).

- Public awareness of what occupational therapy is. Students describe the need to inform the general public on the what, why and how of occupational therapy. Attitudes of high school teachers toward occupational therapy as a profession were considered more influential than those of family members and peers.

Finally, students also briefly reflected on their experience with specific teaching methods. Students felt that “teacher demonstrations” (85%) and “practical training in workplaces” (86%) had facilitated their learning process the most. The majority of students (67%) preferred to complete this practical training in workplaces within different organizations in order to get to know multiple areas of practice. “Making exercises” (69%) and “working together with peers” (63%) were also seen as efficient teaching methods. “Independently processing the subject matter at home” seemed to be the least successful teaching method, as only 35% of students felt that this had facilitated their learning process.

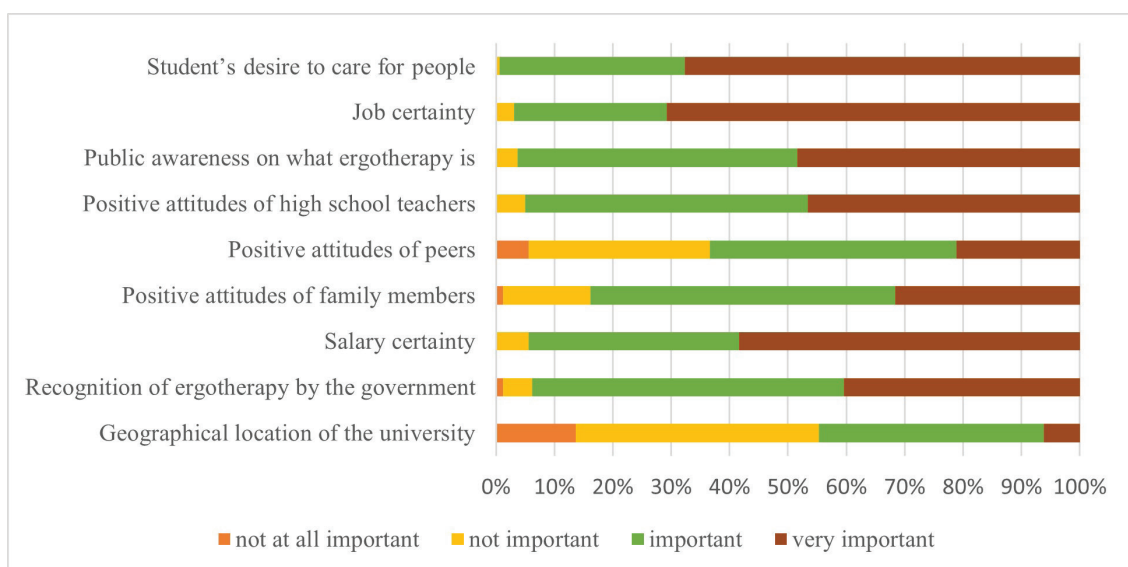


Figure 4. Percentage of students identifying factors as important influences on study choice occupational therapy

Interview study

The thematic analysis revealed three broad themes that are important to take into account when developing a new curriculum occupational therapy in Ukraine: (a) dissatisfaction with the current healthcare and rehabilitation system; (b) the need to raise awareness and establish occupational therapy as a profession; and (c) the need for evidence-based occupational therapy training.

1. Dissatisfaction with the healthcare and rehabilitation system

The first theme reflects participants' dissatisfaction with the way healthcare and rehabilitation are organized in Ukraine, all participants are relevant stakeholders. The majority of the participants ($n = 26$) agree that there are some fundamental problems in their country with healthcare in general and the rehabilitation system in particular. A physical rehabilitation practitioner who combines working in a public hospital as a nurse with a private practice summarizes the problem strikingly:

"95% of patients in need of rehabilitation do not receive it."

Throughout the different interviews, three problems are specified that contribute to participants' experience that there are insufficient opportunities for rehabilitation in Ukraine. First, many participants ($n = 23$) describe a **lack of skilled rehabilitation specialists**, especially in the public sector and in more remote areas. This challenge is often related to participants' concern that, to this day, Ukrainian education institutions do not offer an evidence-based rehabilitation training or occupational therapy program. Furthermore, participants also report that, although employing rehabilitation specialists in public hospitals or state-owned medical institutions is one legal demand of the most recent healthcare reform in Ukraine, the effective implementation of this requirement is not controlled by the responsible Ministries, and thus, in reality, a lot of public workplaces have filled these positions with people who do not have an appropriate rehabilitation training.

"The Ministry of Health does not pay enough attention to the development of rehabilitation. There are not enough physical therapists and occupational therapists in Ukraine, especially in pediatrics." (pediatrician in a public rehabilitation center)

As a result, in public healthcare, when a problem cannot be treated with medication or surgery, there are almost no specialists in physical rehabilitation or occupational therapy to support these people in need. Moreover, this lack of expertise causes social or healthcare professionals to be afraid of people with such problems, as they

do not have the proper knowledge and do not know what to do.

Second, participants ($n = 22$) feel that the outdated post-Soviet focus on restoring functions impaired by illness or injury results in the **absence of an organized and effective state-level rehabilitation system**. This implies that many patients do not learn to cope or live with their disabilities. Furthermore, long waiting times to receive state-level rehabilitation also impair effective treatment processes, as this nurse in physical rehabilitation, employed in a public hospital, describes:

"The experience of my work shows that rehabilitation in Ukraine is not done on time. For example, patients are referred to our hospital for rehabilitation two or more years after suffering a stroke. But these patients should have received the kind of rehabilitation they receive today in the first weeks and months after the stroke".

Finally, although the consensus is that effective state-level rehabilitation is lacking, some participants ($n = 9$) emphasize that the private sector offers effective rehabilitation. There are private rehabilitation centers that already use evidence-based occupational therapy methods. However, treatment in these rehabilitation centers is very expensive, making **private rehabilitation centers financially inaccessible** to the majority of Ukrainian people in need.

2. Need to raise awareness and establish occupational therapy as a profession

In this theme, participants ($n = 22$) point out that there is too much ignorance in Ukraine when it comes to inclusion and disabilities, resulting in negative attitudes toward people with disabilities and a lack of general and government support for socially vulnerable people. At least partly due to this illiteracy, people with disabilities are not seen as equal members of society, neither by the state nor by the general population who most commonly ignores or avoids people with disabilities.

"Our society is not sufficiently aware of how to properly treat people with disabilities." (physical therapist in a specialized school)

More specifically, a frequently discussed example of the lack of government support concerns how the state has no regard for adjusting the environment to increase the mobility and employment or learning opportunities of people with disabilities. Even in hospitals, buildings are not adapted to the needs of people with disabilities, as ramps, spacious enough elevators, or toilets and showers equipped with wall rails are often absent. A physiotherapy instructor working in a private rehabilitation center states:

“Quite often such people are not able to get outside the apartment because there is no elevator in the house or the door to the elevator is too narrow for carts, there is no ramp for entering the house or public institution. The state is very weak on this issue.”

Some participants ($n = 14$) are more optimistic and recognize more awareness and positive attitudes toward people with disabilities, both by the general population and on state level. However, overall, participants agree that evidence-based information is necessary to overcome aforementioned ignorance. There should be more awareness about people with disabilities and the importance of an inclusive society. Furthermore, participants emphasize the importance of promoting the profession of occupational therapy in Ukraine ($n = 24$), given that most Ukrainian people do not grasp what occupational therapy is or what its benefits for people who are facing challenges could be. There are a lot of people who would benefit from qualified occupational therapists, but the majority of them do not know what occupational therapy is about.

“Society itself does not fully know and understand who the ergotherapist is. Even among medical professionals there is a certain information vacuum – they do not understand the content of the profession of an occupational therapist.”

To establish occupational therapy as a profession, it is considered important not only to provide evidence-based information but also to successfully integrate occupational therapy in the medical community to ensure effective collaboration and referral. Furthermore, the government recognizing and supporting the development and establishment of the profession of occupational therapy in Ukraine is also believed to be essential ($n = 21$). Participants would like to see this state support and funding in the creation of occupational therapy jobs in public medical institutions that provide decent salaries and should effectively be occupied by people who have the right diploma.

3. Need for evidence-based occupational therapy training

The third theme demonstrates that all participants agree that Ukraine needs a new and qualified occupational therapy curriculum to tackle aforementioned problems with the healthcare and rehabilitation system (*Theme 1*) and to raise awareness of occupational therapy as a profession (*Theme 2*). A doctor neurologist, employed in a city hospital, points out:

“Improving the training of specialists in occupational therapy and increasing of their number will improve the quality of early rehabilitation of patients.”

Many participants ($n = 20$) emphasize the importance of international collaboration, as they feel that foreign experience is very valuable to the development of a modern rehabilitation system and a qualified occupational therapy program in Ukraine. Furthermore, in line with our second theme that emphasizes the need to reinforce occupational therapy as a profession in Ukraine, some participants argue that occupational therapy should be clearly separated from other professions, especially from physical therapy. The goals and objectives of an occupational therapist should be clearly outlined. This task is at least partly considered a responsibility of the higher education institutions offering an occupational therapy program. Finally, participants offer several suggestions on how to develop this new and qualified occupational therapy program.

3.1. Practical skills training

Overall, the majority of participants ($n = 27$) agree that the new occupational therapy training program should provide more practical training. Now, graduated students often lack practical skills, which results in graduates who are not fully organized and ready for future work in a rehabilitation profession.

“In order for the profession to develop, it is necessary to provide more practical classes in the curriculum.”

Not only should there be more hours of practical training, there should also be more diversity regarding different directions or settings occupational therapists could work in. More specifically, various departments of public hospitals and pediatrics are frequently mentioned workplaces where occupational therapy students should be able to do an internship. Additionally, participants agree that students should not only be able to practice occupational therapy methods during this practical training but should also get the opportunity to get to know and directly interact and work with “real” patients. Students need to learn to feel more familiar with patients. A physical therapist in a private rehabilitation center describes:

“The best way of acquiring necessary skills in the working field of an occupational therapist is practice. Creating access to patients is a very good learning experience.”

Finally, involving (foreign) practitioners as academic teachers who share their lived work experience is also mentioned as a way to include more practice in the education program.

3.2. Not only physical but also psychological focus.

Regarding the content of the curriculum, participants ($n = 10$) emphasize the importance

of providing courses on psychology and related disciplines (such as psychiatry and psychotherapy).

“More knowledge is needed <...> about how the psychology of a person who gets ill is changing in order to know how to motivate him for rehabilitation. This may refer to the subject “Patient Psychology”.” (rehabilitation physician in a private medical center)

Also, providing knowledge on developmental psychology and children pathology seems to be relevant to prepare students as occupational therapists. Finally, communication skills training with different categories of potential patients is mentioned to be important for students to learn how to interact with and especially motivate patients of different age, social status or symptoms.

3.3. Providing equipment and literature access.

As the occupational therapy program should enable students to acquire practical skills (see above), participants ($n = 19$) also emphasize the need for the necessary learning material or equipment. For instance, study rooms in higher education institutions must be provided with modern rehabilitation equipment. This need can be extended further to the work field, as the lack of modern equipment in hospitals or schools often prevents providing the best possible care. Finally, some participants ($n = 6$) feel that it is important to also provide access for professionals, educators, and students to evidence-based and recent literature, preferably in Ukrainian language, as there are now very few recent Ukrainian-language sources of rehabilitation information. Additionally, one participant argues for evidence-based research institutions related to occupational therapy in Ukraine, as a lot of research is done abroad but none in Ukraine.

Conclusions. Taken together, our results are in line with the findings of the comprehensive assessment of the situation of people with disabilities and the rehabilitation system in Ukraine that was carried out by the International Society of Physical and Rehabilitation Medicine [3]. However, our needs assessment also contributes to this assessment by providing concrete suggestions on how to tackle the concern with the rehabilitation workforce in Ukraine and on how to develop a qualified occupational therapy curriculum that meets international standards. Based on the combined results of the aforementioned questionnaire and interview studies, we present three relevant implications to take into account when developing this new occupational therapy curriculum within the UKROTHE project that will be combined with the existing tuning guidelines from the TUNING Occupation Therapy Project Group.

1. Practice-oriented education. First, students as well as people who are already working in the

rehabilitation sector clearly indicate the importance of practical classes and fieldwork opportunities. So far, education has been very theoretical, resulting in graduates with a lack of practical skills who are insufficiently prepared to work independently. Practical skills training in the new curriculum should not only focus on learning specific occupational therapy methods but also on developing broader social and communication skills, so that students learn to interact with and motivate their future patients. This practical skills training can partly take place in the universities (e.g., teacher demonstrations, lessons from practitioners or foreign experts, ...), however, involving students in the practical work within “real” settings such as city hospitals, rehabilitation centers or schools with “real patients” is considered essential to train qualified and skilled occupational therapists.

This means that creating the opportunity for students to engage in such internships within different settings is an important objective for our UKROTHE project. Furthermore, given that understanding human behavior and certain attitudes such as integrity, honesty and self-awareness are characteristics considered important to being a successful occupational therapist in Ukraine, we should also pay attention to these more individual aspects of students’ learning process. Learning students to reflect on their experiences during internships and contact with patients will help them to become more aware of their own behavior and thereby further allow them to develop their professional identity.

2. Reinforce qualified occupational therapy development in Ukraine. Our results suggest that the medical model that considers illness or disability as an individual problem and people with disabilities as merely passive recipients of (medical) treatment still influences the way healthcare and rehabilitation are organized in Ukraine and how the Ukrainian population perceives people with disabilities. Although some stakeholders recognize the shift toward a biopsychosocial model and more positive attitudes toward people with disabilities, this shift is still at an early stage. Participants point out a severe lack of understanding on disabilities and how to support these people, not only by the general population but also by medical professionals. Tackling this lack of understanding is necessary to successfully implement a new occupational therapy curriculum. Therefore, UKROTHE takes into account the following two objectives.

First, we should aim to ensure state recognition and support. More specifically, the creation and acknowledgment of jobs for occupational therapists, especially in the public healthcare or rehabilitation

sector, is considered as an essential step in establishing occupational therapy as a profession and improving the Ukrainian healthcare and rehabilitation system. The National Service of Health of Ukraine is offering healthcare institutions ‘rehabilitation packages’ as reimbursement for services. Occupational therapists are an indispensable part of the rehabilitation team. Therefore, we have a situation now where occupational therapists are in high demand and there is a shortage of qualified occupational therapists in the country. Further initiatives must be undertaken for institutions subject to ministry of social policy and education an science of Ukraine.

This shows the importance of involving government representatives in the development of the curriculum, so that they support its content and recognize occupational therapy as a profession. We have already tried to do this by hearing their voice in our interview study. Another way we aim to ensure their support and involvement is by creating three learning communities (at every Ukrainian higher education institution) to which government stakeholders will be invited. These learning communities will frequently meet during the development of the curriculum to discuss ideas about the necessary qualifications of occupational therapists and to follow up the process of the development of the new curriculum.

Second, we should provide information on the profession of occupational therapy and its value for the Ukrainian people and healthcare. However, this information should be spread amongst a larger audience than interested college students. Reaching the general population to create more awareness of the opportunities and the medical community to ensure smooth cooperation are also important to really put occupational therapy on the map in Ukraine. Clearly outlining the goals and objectives of an occupational therapist and thereby clarifying the difference from other (more well-known) disciplines such as physical therapy seems to be an important first step that is at least partly considered a responsibility of the higher education. An important role here is set out for USET (the Ukrainian Society for Ergotherapist), since early 2021 they were also approved as a full member of the WFOT) and institutions that are offering occupational therapy programs. The combination of communication, information and creation of awareness will be important, as the need to teach children from an early age about inclusion and the influence of high school teachers in students’ choice to study occupational therapy are also demonstrated in our data. Exploring how to reach these audiences and how to help other education institutions to create aware-

ness may be another important question to tackle in the aforementioned learning communities.

3. Broaden the focus. Third, the survey results as well as the interview themes show that nowadays, when it comes to occupational therapy, there is a strong focus in Ukraine on rehabilitating people with physical disabilities. For example, students rate individuals with mainly physical disabilities as the target audience they would most prefer to work with, interviewees consider physical therapist as the profession that most resembles the activities of an occupational therapist, and also in used descriptions of occupational therapy the physical aspect is central. This focus on the physical aspect of health is in line with the medical model that still influences Ukrainian rehabilitation education and healthcare. However, our results again demonstrate the early stage of a subtle shift toward a biopsychosocial model that not only considers health or disability from a physical perspective, but also takes into account environmental and personal factors of the individual. This is in line with the International Classification of Functioning, Disability and Health (ICF), introduced by the WHO (WHO, 2001), an internationally recognized model that influences occupational therapy philosophy and conceptualization across different countries. Broadening the interpretation of occupational therapy in Ukraine is certainly a shift that we further need to adopt in the new curriculum. Our needs assessment reveals two important directions:

- Students as well as practitioners recognize that elderly or individuals with mainly intellectual disabilities or mental health problems could significantly benefit from qualified occupational therapists in Ukraine. However, these target audiences are not rated as very popular to work with by students, as they all prefer to work with people with physical disabilities. Including information on these target audiences in the curriculum or providing the opportunity to work with these patients during internships will make students more familiar with a broader scope of diagnoses and may learn and motivate them to broaden their own career perspective.

- There is a great demand for more knowledge among future students occupational therapy on psychology and other related disciplines. Therefore, the new curriculum should include courses on health psychology and developmental psychology and pathology, so that students gain insight into patients’ motivation and the whole picture of their pathology.

In conclusion, it is important to note that, in order to successfully implement these implications and a biopsychosocial perspective in the new curriculum, we should pay attention to incorporating a certain

way of thinking about occupational therapy concepts across the different courses of the curriculum. Including this broader occupational therapy framework and philosophy will help students to see rehabilitation as a whole and enable them to work not only on individual skills but also on individuals' broader environment. This means that we must avoid focusing solely on designing separate new courses in the improved

curriculum but should also aim to implement a more general point of view or perspective on occupational therapy as a way of interacting with (vulnerable) people.

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REFERENCES:

1. Romaniuk, P., & Semigina, T. (2018). Ukrainian health care system and its chances for successful transition from Soviet legacies. *Globalization and Health*, 14, 116.
2. Goodley, D. (2016). *Disability studies: An interdisciplinary introduction*. London: SAGE Publications Ltd.
3. Golyk, V., & Syvak, O. (2016). Assessment of national disability, health and rehabilitation system in Ukraine. Reflections disability and rehabilitation subcluster meeting. *Ukrainian Bulletin of Medical and Social Expertise*, 19, 26–62 [in Ukrainian].
4. World Health Organization. Towards a common language for functioning, disability and health. World Health Organization. 2020. Retrieved from <https://www.who.int/classifications/icf/icfbeginnersguide.pdf?ua=1>
5. McDougall, J., Wright, V., & Rosenbaum, P. (2010). The ICF model of functioning and disability: Incorporating quality of life and human development. *Developmental Neurorehabilitation*, 13, 204–211.
6. World Health Organization. WHO Global disability action plan 2014-2021. Better health for all people with disability. World Health Organization. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/199544/9789241509619_eng.pdf?sequence=1
7. Gutenbrunner, C., Tederko, P., Grabljevec, K., & Nugraha, B. (2018). Responding to the World Health Organization Global Disability Action Plan in Ukraine: Developing a national disability, health and rehabilitation plan. *Journal of Rehabilitation Medicine*, 50, 338–341.
8. Zaraska, N., Mangusheva, O., Golyk, V., & Syvak, O. (2018). Bringing Occupational Therapy to Ukraine: International collaboration to establish the profession as a part of rehabilitation reform triggered by wounded soldiers of the Donbas conflict. Retrieved from <https://congress2018.wfot.org/downloads/abstracts/SE%2066/Bringing%20Occupational%20Therapy%20to%20Ukraine.pdf>.
9. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.