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ADDITIONAL EDUCATION AS A WAY TO INCREASE QUALIFICATION IN PEOPLE WITH PROFESSIONAL EXPERIENCE

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В статті узагальнено досвід реалізації адаптивної функції безперервної освіти в контексті отримання додаткової освіти для співробітників Національної поліції на базі Національного фармацевтичного університету. В сучасних мінливих законодавчих та соціальних умовах, які потребують постійного підтримання високого професійного рівня, актуальними стають питання отримання додаткової освіти особами з певним професійним досвідом. Згідно Наказів Міністерства охорони здоров'я України Національний фармацевтичний університет увійшов в перелік з двадцяти двох закладів вищої освіти, що будуть виконувати Державне замовлення на підготовку та підвищення кваліфікації осіб, які не мають медичної освіти, але за своїми службовими обов'язками повинні надавати домедичну допомогу, а саме співробітників Національної поліції України. Для організації курсу «Перший на місці події» була проведена підготовка кадрового складу викладачів, забезпечено матеріально-технічну базу та розроблено індивідуальну навчальну програму курсу. Навчання складалось з подання теоретичного матеріалу у вигляді лекцій та відпрацювань практичних навичок із застосуванням наочних та симуляційних методів навчання. 92,5 % слухачів успішно закінчили навчання з середнім результатом 90,3 % під час тестового контролю та 78–91 % – під час складання практичних навичок та отримали сертифікат затвердженого зразка. Порівняння результатів вхідного та контрольного тестування показало зростання рівня знань з першої домедичної допомоги на 40–53 %. Таким чином, курс «Перший на місці події», організований в Національному фармацевтичному університеті, є яскравим прикладом реалізації адаптивної функції додаткової безперервної освіти та відповідає всім критеріям формальної освіти

Ключові слова: безперервна освіта, Національний фармацевтичний університет, «Перший на місці події», додаткова освіта, формальна освіта, компетентності

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1. Introduction

In modern conditions of the concept of lifelong learning, which implies the process of general and professional educational growth of the individual throughout life, the issues of education of people in different periods of their lives become relevant. This system considers educational activities as an integral and basic component of a person's lifestyle at any age. Modern dynamic changes in science and industry require a person to obtain more and more new knowledge, designed for all periods of his/her life – the transition from the principle of "learning for life" to the principle of "learning throughout life" [1]. The development of the system of continuing education is aimed at supporting the competence development of the individual, the implementation of the concept of developmental learning. The competence approach in education creates all the necessary conditions for the diverse development of personality, the formation of competencies and personal qualities that allow you to act effectively in different life situations.

Quite often, additional education comes first, which is a form of continuing education and is aimed at those, who already have the first basic higher education, but for some reason need to obtain additional high-level qualifications. Unfortunately, in modern conditions, up to 50 % of graduates of higher education institutions do not

work in their specialty, which means that people are forced to receive additional education. On the other hand, in some cases, a person's professional activity requires the expansion of his/her competencies, which were not laid down during the receipt of professional education. Thus, there is a problem of additional education by a person with some experience to ensure the continuation of their professional duties.

2. Literary review

The issue of continuing education, namely its scientific justification, was first submitted in 1975 [2]. Further, based on the analysis of research of leading international organizations on the success factors of the lifelong learning program, a number of authors identified that the main characteristics of continuing education are flexibility, adaptability, continuity of all stages of education and unity of all its forms and complex competencies that will ensure readiness for full functioning in the modern world [3]. In the analytical note of the National Institute for Strategic Studies, the issues of goals and functions of continuing education were covered quite carefully. Among the goals were additional vocational education; education that provides diverse groups with the opportunity to adapt to changing living conditions; receiving education in order to meet the various individual educa-

tional needs of citizens. Among the functions of continuing education were: developing, compensating, adaptive, integrating into an unfamiliar cultural context; resocialization function [4]. Also, a number of authors [5, 6] paid attention to various forms of continuing education: formal, non-formal and informal [7]. The articles describe the forms of adult education within postgraduate studies; prove the need to expand the forms of adult education. Emphasis is placed on the fact that the main task of adult education, regardless of the form of its acquisition, is to create conditions for learning throughout a person's life in order to realize his/her life goals and aspirations. The importance of additional education in improving the living standards of people and their families, who lacked opportunities to obtain quality education was also shown. Classes on the program People Educating People were free, were available in many places and online, had thorough and quality training programs [8].

Some authors have studied the impact of continuing education on improving the professional competence of professionals and staffing. It has been shown, that continuing education allows a specialist to constantly improve their level of competence while remaining a sought-after employee in the labor market [9]. Other authors have characterized the current state of the system of training specialists of the civil protection service and pointed to the need to improve it to achieve compliance with modern requirements [10]. *Problems of professional development of specialists in various fields were considered by a number of authors. It was shown, that the programs of continuous training of marketing specialists allow ensuring professional mobility of specialists, prompt acquisition and updating of the necessary knowledge and competencies* [11]. Based on the analysis of the experience of professional development of teachers in some leading countries of the world, global trends in this process were formulated, in particular: diversification of forms of professional development of teachers; individualization of curricula and programs; the need to improve the mechanisms of financial support for training, etc. [12]. Foreign authors have shown the relationship between teachers' experience, basic psychological job satisfaction and motivation and commitment to professional training [13]. The authors also pay attention to the obstacles that hinder the learning process of people with experience, as a result of which they may stop learning. On the other hand, barriers were identified that affect the performance of adult learners [14]. The results of the study indicated that adult students were academically affected by situational barriers (inability to balance work schedules, family and other problems), institutional (often financial) and dispositional barriers (uncertainty about the need to study the subject, insufficient teacher support, etc.).

Unfortunately, the issue of additional education for people with some experience in Ukraine is insufficiently covered. Abroad, this form of education has become more widespread in recent years. For example, in 2020, the initiative of medical students at Wayne State University Medical School (WSUSOM) to create a comprehensive curriculum for first aid was demonstrated. The target audience for this program was members of the Detroit community, who had no prior training in first pre-medical aid. The average age of the audience was

40.9 years, which may indicate that people already have some professional experience in another field [15]. At the same time, such additional education can help save people's lives in emergencies that people with any level of education may find themselves in.

Thus, the problems of implementing such an aspect of continuing education as additional education for people with professional experience become very relevant.

3. The aim and objectives of the study

The aim of the study was to implement the concept of continuing education, namely its adaptive function in the context of additional education, by organizing the teaching of the course "First Responder" for the National Police on the basis of the National University of Pharmacy.

To achieve this aim, the following objectives were set:

1. Staff training.
2. Providing material and technical base.
3. Organization of the educational process on the course "First Responder".

4. Materials and methods

In 2017, the Ministry of Health of Ukraine issued an Order, approving training programs of three levels for the training of persons, who do not have medical education, but in their job responsibilities must provide first pre-medical aid [16]. In 2018, another Order of the Ministry of Health of Ukraine approved the amount of persons to study at the course on first pre-medical aid [17]. The National University of Pharmacy was included in the list of twenty-two institutions of higher education as an institution that will fulfill the State order for training and advanced training of persons in providing first pre-medical aid. To complete the course "First Responder", 40 officers of the National Police of Kharkiv and Kharkiv region were sent to the National University of Pharmacy, of which 5 groups of 8 people each were formed. The course is designed for 48 hours in 1 week: 20 hours of lectures, 26 hours of practical classes. 2 hours were allotted for knowledge control: 1 hour – test control, 1 hour – practical exam.

5. Research results

The discipline "First Pre-medical Aid" is included in the curriculum of students, majoring in 226 "Pharmacy, Industrial Pharmacy", and teaches quite effectively in various institutions of higher education, including the National University of Pharmacy. But the organization of teaching the course on home care "First Responder" at the level of the State Order for students, who do not have medical education, but in their job responsibilities must provide first pre-medical aid was the first time. In order to train the staff, teachers of the Department of Pharmacotherapy were selected – doctors of the highest category of various specialties, who have many years of experience in teaching the discipline "First Pre-medical Aid" to students of the National University of Pharmacy. Two associate professors of the department, headed by the leader of the department, passed the thematic improvement "Teacher-instructor" and "Instructor of the course "First Responder" on the basis of the simulation training

center" TESIMED" – a structural unit of Ternopil State Medical University, named after I. Gorbachevsky and received the relevant certificates. Five teachers of the department took the course "Basic life support" and received certificates from the European Resuscitation Council. To provide material and technical support for teaching on the course "First Responder" the equipment from the list of minimum necessary equipment for the program per group of 8 students, approved by the Order of the Ministry of Health of Ukraine, was purchased.

The teachers of the course adapted the curriculum of the course "First Responder", taking into consideration the requirements of the Ministry of Health of Ukraine, which was approved by the Academic Council of National University of Pharmacy, and developed a curriculum for lectures and practical classes. Before the start of training, students were offered entrance control in order to identify the level of their knowledge before the start of training. The input control was performed in the form of testing with the ability to choose one correct answer. The material of the tests was aimed at determining the level of knowledge of anatomy that will be needed in further training, and knowledge of first aid, which students already had. The input control of knowledge showed the level of knowledge of anatomy as 78.5 %, and the level of knowledge of first pre-medical aid – 38 %. Such results may be due to the fact that listeners do not have up-to-date information. In 2015, the approaches to first pre-medical aid were fundamentally changed, namely cardiopulmonary resuscitation [18], and the Ministry of Health of Ukraine approved new procedures for providing first pre-medical aid to victims [19]. This once again confirms the need for lifelong learning to maintain a professional level. On the other hand, a sufficient level of knowledge of anatomy allowed students to effectively acquire new knowledge in first pre-medical aid. The formation of the theoretical basis for further assimilation of educational material by students took place during lectures. The lecture was the main source of information in the absence of textbooks from the course "First Responder".

At the end of the course, students had to be able to perform an approved list of practical skills that provide them with the acquisition of competencies in the provision of first pre-medical aid. We used Peyton's 4-step method to teach students practical skills [20]. This method consists of 4 consecutive steps: demonstration, deconstruction, understanding and execution. During the demonstration, the teacher performs the skill in real time without comments. This step is done to determine the orientation of learning for the student. Deconstruction: the teacher performs each step of the practical skill slowly with explanations. During the analysis, the skill was divided into smaller parts for easier perception. At the stage of understanding the listener independently describes each stage of the skill, after which the teacher performs it according to the instructions. Description and execution do not occur simultaneously. Execution: the listener simultaneously tells and performs a practical skill step by step. This method facilitates the processing of information (learning) and then the application of this new knowledge (skills) in a particular context (awareness of situations).

The further development of practical skills took place with the use of simulation scenarios, which were designed in such a way that were as close as possible to the real emergency situation. At the same time, the main role in the implementation of stimulation scenarios was given to the students, and the teacher acted as a facilitator, who adjusted the direction of solving the problem, generated questions and more. Simulation training consisted of several stages: learning to work on mannequins (acquaintance with the peculiarities of working with a mannequin), individual practice of certain practical skills, debriefing (assessment of the student's work by the teacher, self-assessment). Debriefing, so-called "feedback", played an important role in the learning process because the students made a large number of mistakes, which required explanation from the teacher. The teacher paid attention to the adherence to algorithms and techniques of practical skills, which is extremely important when providing first pre-medical aid. Particular attention was paid to communication and interaction of students if they worked in a team, which significantly increases the effectiveness of first pre-medical aid in emergencies.

The peculiarity of the simulation training was that in some cases the students themselves acted as a "standardized patient", which allowed bringing the students as close as possible to the real conditions of first pre-medical aid and diversifying the independent work of students. One of the listeners was acquainted in advance with the course of the script and the actions to be performed. He/she then simulated the symptoms of an emergency, and other students provided first pre-medical aid, practicing practical skills. This approach made it easy enough to engage students in systematic repetition of practical skills and to receive constructive "feedback". In addition, the use of the simulation training option with the involvement of a "standardized patient" allowed overcoming certain dispositional barriers that arose in students at the beginning of training (uncertainty about the need to study the subject, a significant difference in officer ranks and age between students) and improve partnerships between teachers and students of the course.

The control of theoretical knowledge was carried out by testing, practical navigators – for the use of simulation tasks, which were evaluated for a special form, developed by the Ministry of Health of Ukraine. In this form, emphasis was placed on "critical points" in the implementation of practical skills, failure to which would lead to the death of the victim in the pre-hospital stage. A failure to complete any of the "critical points" of practical skills was not scored. 92.5 % of police officers successfully completed the course with an average score of 90.3 % during the test control and 78–91 % – during the implementation of practical skills (successful completion of the course is possible only with at least 70 % of correct answers on the theoretical test and under time of practical training). According to the results of the control, we saw an increase in the theoretical level of knowledge of students in first pre-medical aid by 52.3 %, and practical level – by 40–53 %, which will significantly increase the efficiency of their professional activities and save lives in the pre-hospital stage.

6. Discussion of research results

The "First Responder" course, organized at the National University of Pharmacy, is a clear example of the implementation of the adaptive function of additional continuing education, aimed at preparing police officers for first pre-medical aid. In its form, the course "First Responder" refers to formal education, as it met all its criteria, namely conducted in a statutory institution of higher education, provided the acquisition of systematic theoretical knowledge and practical skills according to the approved curriculum, provided targeted training of students, carried out by the specially trained scientific and pedagogical staff of the Department of Pharmacotherapy of the National University of Pharmacy and ended with the receipt of a certificate of the approved sample. Various teaching methods were used during the training: verbal, visual, 4-step method of Peyton and simulation, which provided high efficiency of training and overcoming certain barriers that arose in the students during training. Despite the fact that such a project is being implemented at the state level for the first time in Ukraine, it managed to implement all the tasks. Abroad, such training is usually conducted on a voluntary basis or in private educational institutions. But a certain shortcoming is the relatively small number of trained police officers. In our opinion, further organization of such training is very promising not only for police officers, but also for other persons who, according to the Law of Ukraine "On Emergency Medical Care", are obliged to provide first pre-medical aid to a person in an emergency.

7. Conclusions

1. During organizing the course "First Responder" for seniors with some professional experience, the research and teaching staff of the department, who usually teach students, changed the methods, forms of teaching, influenced the motivation of students. In addition, the scientific and pedagogical staff of the Department of Pharmacotherapy of the National University of Pharmacy (who already have two higher educations – medical and pedagogical) have undergone some retraining in order to improve their skills in a changing legislative and social situation.

2. During the organization of the course the material and technical base of the department was significantly improved in accordance with the training requirements, which ensured the maximum efficiency of mastering the practical skills of providing first pre-medical aid.

3. Directly for the organization of the educational process on the course "First Responder", the work was carried out with the leadership of the National Police in the Kharkiv region in order to provide a contingent of students on the course.

Thus, the experience of organizing the course "First Responder" at the National University of Pharmacy demonstrates the successful implementation of the project of additional education for people with basic vocational education of another profile, and the applied teaching methods ensure its high efficiency.

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