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SYSTEMIC AND METHODOLOGICAL ANALYSIS OF THE FORMATION OF FIRST AID SKILLS IN STUDENTS OF NON-MEDICAL SPECIALTIES

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Abstract: According to statistics from the World Health Organization, 25 percent of victims die from failure to provide first aid at the scene of an emergency. Up to 60 percent of such deaths could have been prevented if a person who knew how to provide first aid was near the victim. That is why the problem of providing first aid, as well as training in it, is still included in the list of problems of human life safety[1].

Keywords: emergencies, first aid, life safety, victim

Introduction. In modern society, the development of first aid skills in students in non-medical educational institutions is of particular importance. This process not only provides students with specific skills and knowledge, but also makes a significant contribution to their personal development and public safety. First of all, learning first aid skills gives students confidence in themselves and their abilities. Knowing how to act in critical situations helps them feel more independent and prepared to solve problems. This is especially important at times when every second counts and a quick reaction can save a life. In addition, developing first aid skills helps students develop social responsibility. They realize their role in society and understand that they can bring real benefits to others. This aspect of training also helps to develop a more empathetic attitude towards other people and expands students' horizons in terms of caring for the wellbeing of others. As a result, mastering first aid skills benefits not only students, but also the entire society. People with this knowledge can provide assistance in case of accidents both in the educational environment and in everyday life. This contributes to the creation of a safe and friendly environment where everyone can count on support and assistance if necessary. Thus, the formation of first aid skills in students in non-medical educational institutions plays an important role both for the individual development of each student and for society as a whole. This process

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not only strengthens self-confidence and social responsibility, but also makes the world a little safer and kinder for all its inhabitants.

Materials and methods of the study. In the course of assessing the study of the process of forming first aid skills among students of non-specialized universities, we analyzed the scientific works of researchers in this field, which assert the need to form first aid skills among students of higher educational institutions of a non-medical profile around the world. A research study conducted in Taif, Saudi Arabia, assessed the awareness, knowledge, attitude, and practice of first aid among medical and non-medical students at Taif University [2]. The study found that the knowledge and skills of first aid among medical students were higher than that of other students. This is because medical students have a direct connection with the profession, which makes them more aware of the importance of first aid than other participants in the study. The study also found that students who received information about first aid as part of their school curriculum had better knowledge and skills in this area. According to this conclusion, first aid in the school curriculum should include more practical training rather than just lectures. In this study, 63.8% of the participants reported that their school curriculum contained information about first aid.

In conclusion, according to the study, half of the participants had good knowledge of first aid, but they did not have the practice or skills. Participants in first aid courses showed higher levels of knowledge and awareness, which was statistically significant. For effective casualty management in emergency situations, individuals need to have a good understanding of the various methods and materials used in first aid [2]. A study conducted among non-medical students at the University of Karachi found that the students' knowledge and skills in providing first aid in various emergency situations were insufficient to provide correct and qualified first aid to casualties in emergency situations [3]. The results of a preliminary experiment conducted at the Mari State University in Yoshkar-Ola, Russia, also showed that students lacked first aid skills despite having a high level of theoretical knowledge. The study also found that the students' stress tolerance level was low, which may indicate a lack of preparedness to respond to emergency situations. The results of a study conducted among students at Yarmouk University in Jordan showed that students also did not have sufficient knowledge of first aid. The researchers noted that in order to reduce early mortality and morbidity from accidents and emergencies, first aid should be included in standard high school and college programs [4].

When organizing the educational process, the main goal is to provide students with the necessary theoretical knowledge and practical skills in the subject. A skill is an action in which individual operations have become automated as a result of exercise. The fact that this action has become a skill means that the individual, as a result of exercise, has acquired the ability to perform this operation without making its implementation his conscious goal.

To improve the level of student training, it is necessary to move away from formalism in the educational process, pull the student out from behind the desk and put him in a situation close to real. Training should be built in the form of problem-solving classes with imitation of various types of accidents. The main goal of such classes is to practice tactics and skills of correct behavior, methods of quickly collecting information about the victim, schemes for alerting

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rescue services and the administration, and most importantly, to teach how to mobilize all available forces and reserves, quickly make rational decisions in difficult conditions of an emergency (darkness, rain, cold, lack of necessary rescue equipment).

It is necessary to include in the training process traditional competitions or contests mandatory questions (stages) on demonstrating first aid skills, providing for the solution of the following tasks:

bring students as close as possible to real conditions of emergency situations;

conduct a powerful psychological and emotional training that will make you remember your mistakes and miscalculations for life;

identify the level of students' training and its compliance with the accepted standard;

evaluate the dynamics of students' training compared to previous competitions;

demonstrate new methods and useful experience;

identify and reward the best.

In the process of theoretical analysis of scientific papers published on the methodology of teaching first aid skills, we encountered different approaches that the authors used to achieve their goals, so in his scientific article Fedorov A.V. suggests conducting classroom classes with students of pedagogical universities using a certain methodology, the author claims that a two-hour classroom lesson cannot be just a lecture or a seminar. From the author's point of view, it would be more reasonable to conduct a combined classroom lesson, in which, during ninety minutes, the following would alternate: listening to a lecture with multimedia slides (35 minutes), consolidating skills in practice (25 minutes), solving situational problems (15 minutes), testing control of acquired skills (10 minutes), results and an assignment for the next lesson (5 minutes). The methodology is distinguished by a combined structure and is carried out during ninety minutes. This allows saving time, since classroom work is not reduced, and the main sections of the discipline remain standard.

Students must consolidate the necessary skills and abilities under the supervision of the teacher during practical assignments and situational problems. In addition, an assessment of the level of students' mastery of the necessary skills is carried out. Then, areas that have not yet been mastered are identified, and students are given more time for out-of-class work. Unlike the traditional lecture-seminar system, the quality of student learning is improved by the final assessment, which includes a credit, testing and an exam. As a result, by the time of the final assessment, students develop deeply conscious skills and abilities in providing first aid. The creation of such a teaching method made it possible, while reducing classroom work for bachelors, not to omit significant sections and topics of the discipline from the program and to improve the quality of mastering the knowledge, skills and abilities of providing first aid by students of pedagogical universities in connection with the transition to a multi-level system of training specialists [5]. As Ekimova, E. S., states in her scientific article, knowing the theory and

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methods of providing first aid does not mean being able to use this knowledge in an extreme situation. It is the psychological factor, if not taken into account, that turns training in first aid techniques into an empty formality. During practical classes, a group of doubts, fears and arguments that interfere with the work of students were identified. One of the central problems is the low motivation for learning and improving the professional knowledge of the target audience. When analyzing the motivation of trainees in civil defense courses through interviews, testing, and classroom observation, the researchers found that in the vast majority of cases, training is not a conscious need to obtain and update knowledge, but rather the execution of orders from senior management. In addition, trainees have past learning experiences that can both enhance their learning ability and reduce their motivation to acquire new knowledge. To enhance motivation, one should refer to the experience of trainees so that they can use their existing knowledge base and integrate the acquired knowledge into their experience, and remember that the audience has the right to evaluate the training material and respond to it. The following doubts and concerns are common among trainees, which reduce their self-esteem: fear of making quick decisions and harming the victim; fear that the victim may die due to the fault of the person providing assistance; fear of infection; fear of critical comments from eyewitnesses; the need to justify the fact that mistakes were made when providing assistance; it is difficult to force yourself to perform artificial ventilation of the lungs of a stranger, to touch his body. Some listeners are convinced that without knowledge of anatomy and classification of injuries and bleeding it is impossible to teach first aid skills, and there is little time for studying. Meanwhile, an eyewitness to an accident only needs to have certain first aid skills and know five or six situations (a state of clinical death, coma, life-threatening bleeding, contact of aggressive liquids with skin and eyes, and thermal burns) in order to actually save and preserve the life of the victim until the arrival of medical personnel[6].

Ekimova, E. S. also states that the following principles are used for effective work with study groups:

- a) the principle of interactive learning, which implies active communication of participants with each other and with the teacher; equality built on partnership relations between students and the teacher, feedback; implementation of the interests of adult learners. This principle maintains high motivation and promotes understanding of the problem by students;
- b) the principle of psychological safety, i.e. modeling psychologically safe conditions for intensive, emotional communication during the performance of tasks;
- c) imitation of various types of accidents the main goal is to practice tactics and skills of correct behavior in an emergency situation and ways to quickly collect information about the victim, teach how to quickly make rational decisions in difficult conditions (darkness, rain, cold, lack of necessary rescue equipment);
- d) use of simulators for cardiopulmonary resuscitation, which helps bring the conditions in the classroom closer to real ones; d) consideration of the emotional complexity of the material: the classes and the material under consideration should stimulate positive emotions. The practical lesson should end on a positive emotional background. To activate the learning process, it is

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necessary to create conditions for better perception of information: use slides, educational films, tactile sensations are useful for the trainees when working with the simulator.

In his work, Kulagin, A.S. emphasizes that, in order to implement a systematic approach to mastering the techniques of first aid to victims within the framework of the course "Fundamentals of Life Safety", the researchers developed and implemented a set of situational problem tasks, including the characteristics of situations related to the need to provide first aid in various emergency situations. The specified complex includes tasks of two types: non-imitation (training) and simulation (real). The solution of these problems involves a consistent ascent from mastering general algorithms for providing first aid to victims to such direct actions in situations close to real conditions. The solution of non-imitation problems involves familiarizing comprehensive school students with a situation presented in text or graphic form. Its solution involves the student performing analytical, evaluative, prognostic and recommendatory actions with the choice of the algorithm of actions necessary in specific conditions without the use of practical skills. Simulation tasks provide for further complication of the conditions of situational tasks that require additional material and technical equipment, modeling of a situation close to real conditions. The solution of this type of problem for students has the nature of a game activity, suggesting "living" the situation in its game embodiment (M. V. Klarin). In didactic terms, the solution of simulation problems by students involves a sequential passage of stages: analysis of the conditions and requirements of the problem; selection of the necessary algorithm of actions; characteristics of the algorithm; performance of practical actions to provide first aid. Experimental work on the use of a situational approach in mastering first aid techniques by students of a comprehensive school in comprehensive schools of the Nizhny Novgorod region made it possible to speak about the effectiveness of the chosen methodology [7].

Results and discussion. Based on the analysis of scientific research data on training and improving first aid skills of students of non-medical educational institutions, it can be said that the structure of training in first aid skills and the degree of students' interest in first aid skills show an incomplete degree of interest and do not meet the requirements of modern times. The increase in the number of industrial accidents and disasters, dangerous social situations and the spread of destructive forces of nature also confirms that the population does not have the skills of proper behavior in everyday life. Young people are a special group of people who need to change their understanding of their own safety and the safety of others, as well as how to lead a safe life. Analyzing the capabilities of the current professional education in the field of first aid in emergency situations and comparing them with the real organization of professional education in pedagogical institutions of higher education, we came to the conclusion that the existing system is in dire need of creating a concept for organizing the processes of forming first aid skills among students of higher educational institutions. To achieve this goal, it is necessary to organize and manage the training processes for the formation of first aid skills among students based on a systems approach, which requires careful coordination and integration of various educational and administrative aspects. The system approach involves the use of a holistic methodology, including analysis of learners' needs, development of training programs, selection and training of qualified teachers, and implementation of effective methods of assessment and control of knowledge and skills. An important element is the creation of an educational and

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material base equipped with modern equipment and training tools that simulate real conditions of first aid.

List of references:

- 1. World health organization, injuries and violence prevention. [Nov;2019];https://www.who.int/violence_injury_prevention/publications/other_injury/en/burns_factsheet.pdf
- 2. "Awareness, knowledge, attitude and practices of first aid skills among medical and non-medical students at Taif University" Raneem moutlaq Alsayali Anood Qalil Awwad Althubaiti Reham Mohammed Altowairqi Fatemah Abdulsalam Alsulimani Bayan Mansour Alnefaie
- 3. "Knowledge, Attitude and Practices of First Aid among Non-medical Students of Karachi" University Zaeema Ahmer1*, Dua Moin2, Aroosa Khalil2, Areeba Akram2, Eisha Obaid2 and Hafsa Jawaid21APPNA Institute of Public Health, JSMU, Karachi, Pakistan 2JSMU, Karachi, Pakistan
- 4. "First Aid Knowledge among University Students in Jordan" Published online 2016 Jan 22. doi: 10.4103/2008-7802.174772
- 5. Fedorov A.V. "Formation of key professional competencies in the field of medical knowledge among student teachers" // Fundamental research. 2012. No. 11-6. P. 1404-1408;
- 6. Ekimova, E.S. "Psychological barriers of students when studying the topic "First aid techniques" in civil defense courses" / E.S.Ekimova, S.V.Kolyaskina, V.A.Furman. Text: direct // Pedagogy of higher education. 2016. No. 3.1 (6.1). P. 74-76.
- 7. Kulagin, A. S. "Situational approach to mastering first aid techniques by comprehensive school students" / A. S. Kulagin, G. V. Sukhov. Text: direct // Pedagogy of higher education. 2016. No. 3.1 (6.1). P. 121-123.
- 8. Palvanova, U. B., & Turgunov, S. T. (2024, August). Summary of scientific research on improving first aid skills of students from non-medical higher education institutions. In INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE (Vol. 1, No. 8, pp. 16-17).
- 9. Palvanova, U. B., & Turgunov, S. T. (2024, August). Summary of scientific research on improving first aid skills of students from non-medical higher education institutions. In INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE (Vol. 1, No. 8, pp. 16-17).
- 10. Palvanova, U., Turgunov, S., & Yakubova, A. (2024). ANALYSIS OF THE PROCESSES OF TEACHING FIRST AID SKILLS TO STUDENTS OF NON-MEDICAL HIGHER EDUCATIONAL INSTITUTIONS. Journal of universal science research, 2(7), 85-94.

Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

- 11. Palvanova, U. B. (2024). The Importance of Developing First Aid Skills Among Students in Non-Medical Educational Institutions. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 27, 93-98.
- 12. Palvanova, U. B. (2024). The Importance of Developing First Aid Skills Among Students in Non-Medical Educational Institutions. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 27, 93-98. Palvanova, U. B., & Turgunov, S. T. (2024, August). Generalization of scientific research on improving the first aid skills of students of non-medical higher educational institutions. In INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE (Vol. 1, No. 8, pp. 16-17).
- 13. Palvanova, U., Yakubova, A., & Yusupova, Sh. (2023). ULTRASONIC EXAMINATION IN SPLENOMEGALIA. Talqin va tadqiqotlar, 1(21).
- 14. Palvanova, U. B., Izranov, V. A., Gordova, V. S., & Yakubova, A. B. (2021). Splenomegaly by ultrasound—are there universal criteria?. Central Asian Journal of Medical and Natural Science, 2(3), 52-27.
- 15. Stepanyan, I. A., Izranov, V. A., Gordova, V. S., Beletskaya, M. A., & Palvanova, U. B. (2021). Ultrasound examination of the liver: search for the most reproducible and easy-to-use technique for measuring the oblique craniocaudal size of the right lobe. Radiation diagnostics and therapy, 11(4), 68-79.
- 16. Palvanova, U. B. (2024). The Importance of Forming First Aid Skills in Students in Non-Medical Educational Institutions. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 27, 93-98.