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SIMULATION MEDICINE AND OTHER INNOVATIVE TECHNIQUES IN THE STUDY OF INTERNAL MEDICINE FOR THE 5TH YEAR STUDENTS

Resume. The priority of the national education system in Ukraine is the training of specialists who are competitive on the world market [1]. This goal is achieved by the introduction of a variety of interactive teaching methods into the educational process, the use of simulation techniques for in-depth training of practical skills, under conditions close to the future profession. A study of the effectiveness of simulation training methods shows

that in this case, the level of motivation for further self-education becomes much higher, as it creates a real environment that a student may face in their future professional activities [8].

Key words: interactive learning, simulation center, training, situational tasks, practical skills.

Relevance. The modern labor market places high demands on the training of competitive, highly qualified doctors because the society needs independent, creative specialists, initiative and enterprising, able to work in a team, to offer and develop ideas, to find innovative solutions [15]. Therefore, the problem of the lack of professional competence of graduates is very relevant today. One of the main reasons for this situation is that insufficient attention is paid to solving practical problems in the field of the future professional activity of specialists. After all, usually people remember:

5% of lectures

10% of what they read

20% of what they see with their own eyes

50% of what they listen and see at the same time

70% of what they discuss and write

80% of what they do in own hand

90% of what they do and discuss at the same time

95% of what they teach others [17].

Aim. Defining the role of simulation training in increasing students' motivation in the study of internal medicine.

Main part. Studying at a higher educational institution involves not only the compulsory acquisition of theoretical knowledge but also the qualitative mastery of future specialists by practical skills and competences. This is an important component of modern medicine [5]. Such an approach will allow future specialists to develop skills of dialogic communication, a tolerant attitude to the opinions and views of colleagues, the ability to distinguish (isolate) the problem from the general situation, to choose the best way to solve, predict and analyze the results that meet the criteria of professional competence of the specialist. Active and interactive forms and methods of education play an important role in training competitive, highly skilled health care professionals [3].

To prepare a competent medical professional ready for independent work, a combination of traditional teaching methods using innovative technologies is required [4]. Student have to master the basic skills before they face real life situation (work). However, on clinical bases it is not always possible to provide the necessary means for mastering practical skills, often the low prevalence of a particular nosology does not make it possible to familiarize the student with it in practice [6]. Therefore, to increase students' motivation in the study of internal medicine, various active teaching methods are actively used: the method of active dialogue (discussion), presentations, the crew-role method, simulation role-playing games. Such approaches to the organization of students' work in practical classes should activate mental activity, develop their creative potential and research approach to solving specific professional problems in the discipline being studied [7, 10].

Also, a study of the effectiveness of simulation teaching methods shows that in this case, the level of motivation to further self-education becomes much higher, since it creates a real environment that the student may face in his future professional activity. In addition to working in simulation (training centers), the use of situational clinical tasks (in pulmonology, cardiology, hematology) as role-playing games are used in the study of internal medicine. After all, educational simulation game, most fully corresponds to the idea of a new, contextual type of training, because it reflects its most characteristic features [16, 19]. In this regard, the main task of the educational simulation game is not only to simulate the real conditions of professional activity in training, but also to provide opportunities for reproduction or imitation of those contradictions faced by a specialist in the path of knowledge and professional activity. Clinical tasks used can be of various types: with complete data, incomplete data, the required data is provided by the teacher at the request of students, in others, there may be so-called excess data, implicitly presented alternatives of choice, situations that require decision-making. At the same time, separate groups of students are given separate roles: imaginary patient, family doctor, an emergency room doctor, a doctor who is responsible for laboratory-instrumental research, doctor-resident of the department, who must determine the program of differential diagnosis and treatment, expert, etc [12].

An example of a simulation game that is regularly used in the study of certain areas of internal medicine is also the clinical analysis of a thematic patient [18]. An independent survey, examination by a student as a doctor ends with group discussion. The teacher acts as a so-called expert, gradually adding information from the medical history, if necessary, directing from simple to complex. Under the guidance of the teacher, students distinguish the main symptoms based on survey data, review, additional research methods. Analyzing the findings, future physicians combine information into syndromes of pathogenic significance. The selected pathological syndromes are systematized, determining the leading syndrome and its pathogenetic relationship with other manifestations of the disease. A significant step is the formulation of the preliminary diagnosis and its justification. Students learn how to identify the differential number of nosologies that are accompanied by similar symptoms and syndromes. If necessary, an additional examination plan is provided to clarify the underlying and associated pathology. The detailed diagnosis of the main and accompanying diseases is established [14].

In addition, the main focus is on the principles of drug therapy, the presence of indications and contraindications to the appointment of specific pharmacological groups, discusses the benefits of certain drugs, the possibility of side effects, discusses

the advantages and disadvantages of different treatment regimens offered by students, taking into account the problems of the drug interaction, age aspects, and comorbidity, etc. It also predicts the expected effect of treatment, the prognosis of the disease (recovery, improvement, etc.), indicate the preventive measures to eliminate recurrence or progression of the disease [11]. Experience has shown that the work of students, mainly during the 5th year of study, directly at the bedside of the patient, does not always fully force them to take a creative approach to find the right diagnosis. Therefore, students' evening shifts are actively used in the departments of the therapeutic profile, where they find themselves in the most real conditions of future work. During the night hour shifts, students participate in clinical rounds, screening for severe patients, and provide emergency care to urgent patients [13].

The results of the night shifts are discussed in detail in the next session, where students report the basic data concerning the examined patients, substantiate the diagnosis, present the plan of examination, treatment, and listen to the comments of not only the teacher but also their colleagues. In our opinion, the experience of evening shifts is invaluable, since it contributes not only to improving both theoretical and practical knowledge of internal medicine but also to the formation of clinical thinking in future physicians [21].

The use of such forms of student learning is fully justified in terms of current principles of educational simulation, as it facilitates the accumulation of professional competencies for students and allows them to adapt more easily in real professional activity in the future.

Conclusions. Thus, the undeniable advantage of simulation technologies is that their implementation allows you to move away from traditional forms of the educational process in practical classes, allows you to shift the focus on the student, allowing the latter to practice skills, make mistakes and correct them, analyze the situation and draw conclusions [2]. The application of methods of active learning, in particular, simulation role-playing, allows medical students, while remaining in the position of students, to perform professional actions and deeds. The form of organization of such activity practically reproduces the forms of real professional activity [20]. A successful alternative to patient education is simulation training. The principles of the organization of the educational process based on imitation technologies allow achieving specific goals and objectives of training with the possibility of repeated execution of the educational activities to the formation of a certain skill or skill, as well as with the possibility of impartial imitation of various professional situations. In the medical education system, simulations underlie several techniques designed to reproduce clinical situations for learning, repetition, assessment, and research. Simulation techniques range from a basic level in the form of verbal simulation to more advanced ones, such as standardized patients [9].

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ОСОБЛИВОСТІ ЗАСТОСУВАННЯ МЕТОДУ КОЗЯВКІНА ДЛЯ РЕАБІЛІТАЦІЇ ПІДЛІТКІВ З ДИТЯЧИМ ЦЕРЕБРАЛЬНИМ ПАРАЛІЧЕМ

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PECULIARITIES IN USAGE OF THE KOZYAVKIN METHOD FOR THE REHABILITATION OF ADOLESCENTS WITH CEREBRAL PALSY

Анотація. В статті представлений алгоритм застосування методу Козявкіна для реабілітації підлітків з різними клінічними формами дитячого церебрального паралічу та проведена оцінка його ефективності. Отримані результати показали, що реабілітація за методом Козявкіна, яка здійснювалась за наведеним алгоритмом, сприяла покращенню психічного розвитку, редукції психопатологічної симптоматики та підвищенню якості життя підлітків та їх сімей.

Summary. In this article, the algorithm of Kozyavkin Method for rehabilitation of adolescents with different clinical forms of cerebral palsy is presented as well as it's effectiveness that was evaluated. The obtained results showed that Kozyavkin rehabilitation Method, which was performed according to the above algorithm, contributed to the improvement of mental development, reduction of psychopathological symptoms and improvement of quality of life of adolescents and their families.

Ключові слова: дитячий церебральний параліч, підлітки, психічний розвиток, реабілітація, метод Козявкіна.

Key words: cerebral palsy, adolescents, cognitive development, rehabilitation, Kozyavkin Method.