

## DIFFERENTIATED INFLUENCE OF INTERACTIVE LEARNING METHODS ON FORMATION OF THE LEVEL OF CLINICAL KNOWLEDGE

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**Abstract:** A new social order has arisen in society: people are in demand who quickly find their bearings in various situations, creatively solve the problems that have arisen, understand and take full responsibility for their decisions. The introduction of interactive forms of education is one of the most important areas for improving the training of students in a modern university.

The main methodological innovations today are associated with the use of interactive teaching methods. Interactive learning is a special form of organizing cognitive activity. It implies very specific and predictable goals. One of these goals is to create comfortable learning conditions in which the student or listener feels his success, his intellectual viability, which makes the learning process itself productive. Interactive learning methods include those that oblige students to independently obtain, process and implement information presented in a certain didactic form. This type of training, unlike traditional ones, significantly enriches the knowledge bank while increasing the potential of students' creative thinking. The basis of interactive approaches to learning is the interaction of the teacher and students, as well as students among themselves.

Key words: interactive forms of education, student, teacher.

A new social order has arisen in society: people are in demand who quickly find their bearings in various situations, creatively solve the problems that have arisen, understand and take full responsibility for their decisions. (1).

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The main methodological innovations today are associated with the use of interactive teaching methods. Interactive learning is a special form of organizing cognitive activity. It implies very specific and predictable goals. One of these goals is to create comfortable learning conditions in which the student or listener feels his success, his intellectual viability, which makes the learning process itself productive. (2) Interactive learning methods include those that oblige students to independently obtain, process and implement information presented in a certain didactic form. This type of training, unlike traditional ones, significantly enriches the knowledge bank while increasing the potential of students' creative thinking. The basis of interactive approaches to learning is the interaction of the teacher and students, as well as students among themselves. At the same time, the main conditions for the existence of an interactive are: the presence of a goal for the achievement of which a dialogue is initiated, a direct and prompt exchange of information between a teacher and students, a certain scientifically based degree of equality in the distribution of functions performed in the process of solving a problem, a high level of knowledge and mutual understanding necessary for achieving the main goal.

Interactive learning allows you to solve several tasks at the same time, the main of which is the achievement of learning goals, the development of communication skills. It helps to establish emotional contacts between students, provides an educational task, because it teaches you to



work in a team, listen to the opinion of your comrades.

Interactive forms of learning are usually divided into imitation and non-imitation. Simulation methods, which include educational clinical games, immerse students in an atmosphere that is extremely close to the practical work of a doctor. Moreover, it forms and maintains the emotional intensity of the participants and increases the sense of responsibility for the fate of the patient, at least at her intellectual level. Educational clinical games allow you to systematically control the quality of the increase in the professional training of students, and play the role of a barrier on their way to the patient's bed, passing only the prepared part of them to the patients (3).

**The aim** of the study was to compare the didactic possibilities of interactive teaching methods "weak link" and "case study" in the formation of the potential of students' knowledge in the subject of clinical pharmacology.

**Materials and research methods.** In order to achieve the tasks set in practical classes on the subject of clinical pharmacology, interactive teaching methods were purposefully used - educational clinical games "weak link" and "case study". The rating indicators of students obtained using traditional methods of knowledge assessment served as a control. The groups of students involved in the study were representative in terms of the number of: students, stages and types of knowledge assessment, as well as their individual rating. The level of knowledge was systematically checked with the help of oral and written (crossword puzzles, tests, situational tasks, and others) tasks in the course of current, intermediate and final examinations. The interactive game "weak link" was used in a modified version, the essence of which was as follows: the questions were divided according to the level of complexity into easy (L1), medium (L2) and difficult (L3). Their ratio in the general bank of questions was 1:2:1. The value of the allocated points and the time provided for the correct answers depended on the degree of complexity of the question and increased as the latter grew (3).

**Research results.** In the course of the research, the following results were obtained. It has been established that interactive teaching methods, unlike traditional ones, generally have a more effective effect on the process of assimilation of a complex of clinical knowledge. In addition, they clearly differed in the individual nature of the impact on the formation of well-known levels of knowledge. So, if traditional teaching methods influenced the development of mainly initial I (knowledge - acquaintance) and II (knowledge - copy) levels, then interactive teaching methods on more advanced III (knowledge - skill) and IV (knowledge - creativity) forms.

Classes conducted with the use of the educational game "weak link" were distinguished by the high activity of the participants, which is partly due to the condition of its conduct, which requires the indispensable participation of all members of the group. The ending of this training game became very tempting, especially when the final pair of participants remained. The definition of a leader - an expert in the group always ended with a surge of emotions and enthusiasm on the part of the participants. At the same time, the possibilities of this game in terms of improving individual levels of knowledge turned out to be far from equal. According to the results obtained, the interactive method of teaching the "weak link" contributed to the improvement of I (acquaintance) and II (copy) levels of knowledge. It did not particularly affect the formation of more advanced levels (III-skill and IV-creativity). The latter significantly limits the possibilities of using the educational game "weak link". To achieve the desired result, the choice of a real educational game should be differentiated, taking into account the specifics of a particular lesson. For the level of acquired knowledge with the help of it, especially from the



private section of the subject of clinical pharmacology, may eventually turn out to be low (3).

Somewhat distinctive were the results obtained as a result of the use of an educational clinical game - "case study". When analyzing a case, students actually get a ready-made solution that can be applied in other similar circumstances. As the number of analyzed cases grows, the chance of using a ready-made decision scheme in one of the next situations with a similar nature increases. Consequently, skills are formed to scrupulously solve more serious problems (4). This interactive method of learning contributed to a significant increase in the baggage of both theoretical and practical knowledge of students. He contributed to the maximum understanding of the importance of the dialogue between the doctor and the patient and the improvement of the potential of clinical thinking, as well as the ability to timely use theoretical knowledge in one's own practice. It should be emphasized that the successful implementation of the educational clinical disciplines, as well as a wide range of manipulations. This was due to the condition of collecting subjective and objective information, the closest to the real clinical situation.

It should be noted that the educational clinical game "case study" aroused increased interest of all participants. The knowledge obtained with the help of this type of educational game was much perfect and corresponded to its level III (knowledge - skill), and even IV (knowledge - transformation). More than half of the game participants clearly formed elements III (knowledge-skill), and the rest of the IV level (knowledge-creativity) knowledge. Along with this, the bank of clinical knowledge was enriched much faster, which is an important and distinctive superiority of this method of teaching.

Another positive quality of the educational game "case study" was also traced. Among the participants - "players" the frequency of people who own the methods of physical research has steadily increased and, most importantly, the quality of their implementation has improved, which corresponds to the goal and objectives of the subject of clinical pharmacology.

Scenarios for various clinical situations have been developed at the department, special conditions have been created with the equipment necessary for conducting educational clinical games. The teacher vigilantly monitors the course of the educational game, strictly controls every action of the participants. In cases of slip tolerance, scrupulously corrects them. At the request of the situation, he often introduces additional information that complicates the clinical situation. In the course of the educational game, participants are allowed to discuss the role of each symptom in the diagnosis of a given disease, to discuss a plan for the upcoming examination of such patients. Summing up the lesson, the teacher gives an objective assessment of the actions of each participant in the game, comments on the answers, and corrects the survey plan. Acting as an arbiter, he dwells in detail on the miscalculations and mistakes made by the students "players" and advises on ways to eliminate them. (3)

On the basis of the conducted research, it can be concluded that interactive teaching methods: "weak link" and "case study" influence the formation of individual levels of knowledge in different ways. So, if the first of them contributed to the predominant growth of I and II, then the second - III and IV levels of knowledge. Taking into account the latter, the choice of the educational game method should be carried out in accordance with the goals and objectives of each lesson. We consider it expedient to use the interactive game "weak link" in the course of teaching general classes, and "case study" of the special part of the subject of clinical pharmacology.

Thus, the use of educational clinical games in the process of teaching the subject of clinical



pharmacology significantly develops the baggage of clinical knowledge while increasing the cognitive ability of students. Gives them creative independence, expands and strengthens the range of acquired practical skills. Students, in these educational games, have the opportunity to take the initiative, to feel independence in mastering theoretical positions and mastering practical skills. The main thing is that they easily perceive the presented educational material. Ultimately, all this contributes to the assimilation of new theoretical and practical knowledge, improves the quality of training of future general practitioners (3).

Summing up the above, it should be noted once again that these methods provide an excellent opportunity to creatively apply the material covered on the basis of their professional knowledge and allow students to quickly adapt to real and potential situations. No less important is the fact that the analysis of situations quite strongly affects the professionalization of students, contributes to their maturation, forms interest and positive motivation for learning (4).

The use of interactive forms in the learning process, as practice shows, relieves the nervous load of students, makes it possible to change the forms of their activity, switch attention to the key issues of the topic of the lesson.

## **Bibliography:**

- 1. Ermakova T.I., Ivashkin E.G. "Conducting classes using interactive forms and teaching methods." Study guide, Nizhny Novgorod 2013 pp 4-5
- 2. Ermakova T.I., Ivashkin E.G. "Conducting classes using interactive forms and teaching methods." Textbook, Nizhny Novgorod 2013 page 137
- 3. G.S. Xodjieva, Z.M. Orziev "The results of assessing the levels of clinical knowledge obtained by interactive forms of education." // Diary of the Kazan Medical School, No. I (IV) -2014.
- 4. Pokushalova L. V. The case-study method as a modern technology for professionally oriented student education // Young scientist. 2011. No. 5. T.2. with. 155-157.
- 5. Komil o'g'li A. M. Orientation to Acute Kidney Injury in Covid-19 //БАРҚАРОРЛИК ВА ЕТАКЧИ ТАДҚИҚОТЛАР ОНЛАЙН ИЛМИЙ ЖУРНАЛИ. 2021. Т. 1. №. 5. С. 330-333.
- Amonov M. K. O. Risk factors for severe and critical patients with COVID-19 //Oriental Renaissance: Innovative, educational, natural and social sciences. – 2021. – T. 1. – №. 10. – C. 1080-1084.
- 7. Амонов М. К. У., Кароматов И. Д. Мед и его использование при заболеваниях дыхательных путей, слизистых оболочек и глаз //Биология и интегративная медицина. 2020. №. 3 (43). С. 171-187.
- 8. Komil o'g'li A. M. RISK FACTORS FOR SEVERE AND CRITICAL PATIENTS WITH COVID-19. 2021.
- Амонов М. К. Острое Повреждение Почек При Коронавирусной Болезни (Обзорная Статья) //CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. – 2021. – С. 378-382.
- 10. Баймуродов Р. С., Амонов М. К. Иппотерапия как метод лечебной физической культуры (обзор литературы) //Биология и интегративная медицина. 2017. №. 3. С. 217-241.



- Раджабова Г. Б., Джаббарова М. Б., Саломова Н. К. Меры по профилактике факторов риска хронической обструктивной болезни легких //Новый день в медицине. – 2020. – №. 4. – С. 519-521.
- 12. Bahodirovna R. G., Shavkatovna G. S. Hemodynamic profile of patients with chronic obstructive pulmonary disease and obstructive sleep apnea syndrome //ACADEMICIA: An International Multidisciplinary Research Journal. 2021. T. 11. №. 12. C. 587-591.
- Kizi M. S. S. Risk Factors and Morphological Features of Breast Diseases Fibrosis-Cystosis //EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION. – 2022. – T. 2. – №. 12. – C. 82-85.
- 14. Агабабян И. Р. и др. Метаболический синдром как один из основных факторов развития артериальной гипертонии //Достижения науки и образования. 2019. №. 10 (51). С. 54-58.
- 15. Agababyan I. R., Agababyan L. R. The diagnostic value of routine research methods electrocardiography and echocardiography in patients with chronic heart failure elderly //International Conference «Process Management and Scientific Developments. 2019. C. 168-171.
- 16. Sivkov I. I., Mukharlyamov N. M., Agababyan I. R. The effect of peripheral vasodilating agents on the microcirculatory channel in congestive circulatory insufficiency //Sovetskaya meditsina. 1987. № 1. С. 3-9.