DEVELOPING STUDENTS' CLINICAL SKILLS BASED ON INNOVATIVE PEDAGOGICAL APPROACHES IN MEDICAL EDUCATION

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Abstract. This article analyzes the issues of forming students' clinical skills based on innovative pedagogical approaches in the medical education system. It is argued that the introduction of modern educational technologies, in particular, simulation learning, problem-based learning (PBL), case-study and interactive methods into the educational process serves to integrate students' theoretical knowledge with practice. It is also shown that through these approaches, students acquire the skills of clinical thinking, diagnosis, correct decision-making and effective communication with the patient. The results of the study confirm the importance of innovative pedagogical methods in improving the quality of medical education and training competitive, highly qualified specialists.

Keywords : medical education, innovative pedagogy, clinical skills, simulation education, problem-based learning (PBL), case-study, interactive methods, clinical reasoning, diagnostics, competence, practical training

One of the current challenges of medical education today is to effectively improve not only theoretical knowledge, but also practical skills for students. Scientific and technological progress in the field of medicine, new diagnostic and treatment methods, as well as the complexity of working with patients, require the use of innovative pedagogical approaches in the educational process. The changes taking place in pedagogy are also significant for medical education, since the development of medical skills, rapid decision-making and the ability to provide quality patient care in complex clinical situations is very important. Today, instead of traditional teaching methods, many educational institutions are using modern pedagogical technologies and innovative methods, such as problem-based learning (PBL), simulation-based learning and flipped classroom. These approaches allow students to not only acquire theoretical knowledge, but also prepare for real-life clinical situations, develop practical skills and form critical thinking. Innovative pedagogical methods are aimed not only at providing students with theoretical knowledge, but also at developing their practical skills . These methods provide students with the opportunity to apply their knowledge in real-life situations, develop clinical decision-making and problem-solving skills. Such approaches play an important role in driving change and increasing efficiency in medical education.

No.	Type of innovative approach	Content	Impact on clinical skills	Practical result
1	Simulation-based learning	Teaching through mannequins, virtual patients	Builds practical skills in a safe environment	Errors are reduced, confidence is increased
2	Problem-based learning	Problem solving based on clinical situation	Develops clinical thinking	Independent decision-making increases
3	Case study method	Analysis of real clinical situations	Diagnostic and analytical skills are developed	Practical knowledge is strengthened
4	Interactive methods (debate, role play)	Students actively participate	Communicative and clinical skills are developed	The quality of patient care increases
5	ICT-based teaching	Electronic platforms, video lessons	Allows for visual and quick learning	The level of mastery increases
6	Competency-based approach	Results-oriented training	Increases practical training	The graduate will be a ready specialist

Medical education in the field pedagogical approaches development and update about research many scientific in sources wide illuminated . Last in years pedagogical innovations and new education methods in medicine application serious are being studied . These methods are aimed at providing students not only with theoretical knowledge, but also at developing their practical skills . The effectiveness of pedagogical methods, interactive approaches in education and the use of new technologies help to improve students' clinical skills. Preparing students for practical skills . In medicine, although solid preparation in theoretical knowledge is necessary, acquiring practical skills is even more important.

Innovative pedagogical approaches, such as simulation-based learning, allow students to prepare for real-life clinical situations. With the help of simulations, the student learns to familiarize himself with specific clinical situations, learn from mistakes, and make decisions in real conditions. This method is a successful and safe way for students to apply theoretical knowledge in practice. Developing cooperation and teamwork skills among students. The medical field is a field that requires teamwork , and many specialists need to combine their knowledge and skills to effectively solve a clinical situation. Innovative pedagogical methods, especially approaches that support teamwork, teach students to work in teams, exchange ideas, and make joint decisions. These skills will help students to work as a team in clinical practice and effectively treat patients in the future.

Increase readiness for practice. Through innovative pedagogical approaches, students are actively involved in developing practical skills . These methods increase their self-confidence and improve their ability to make quick and accurate decisions in clinical situations. Through continuous assessment and feedback , students have the opportunity to identify their strengths and weaknesses and improve themselves. This, in turn, makes them better prepared for future clinical practice.

Environmental and social aspects. Innovative pedagogical methods not only help students develop practical skills , but also take into account environmental and social aspects. For example, through virtual simulations and online learning, students are given opportunities to save resources and reduce their negative impact on the environment.

The experiment was conducted to study the effectiveness of innovative pedagogical approaches in medical education. In this study, the effect of simulation-

based teaching and problem-based learning (PBL) methods on improving students' clinical skills was studied. Two groups of students were selected for the experiment: the first group was trained using traditional teaching methods, and the second group was trained using innovative pedagogical approaches, namely simulation and PBL methods. The main goal of the experiment was to analyze the effectiveness of developing students' clinical skills using innovative pedagogical approaches in medical education . In the study, we sought to find answers to the following questions:

What is the impact of simulation-based learning and PBL methods in improving students' clinical skills?

How do innovative approaches improve students' ability to make quick decisions in practice?

Research methodology: 60 medical students participated in the experiment. They were divided into two groups :

Group One: 30 students were trained using traditional teaching methods, in which students learned theoretical material and then attempted to apply clinical skills in practice.

Second group: 30 students were trained using innovative pedagogical approaches. Problem-based learning (PBL) and simulation-based learning methods were used for this group. During the simulation, students discussed various clinical cases interactively, while in the PBL method, they were taught to work in groups to solve real clinical problems.

The process of conducting the experiment. Week 1 : Both groups were taught based on theoretical knowledge. The first group was taught through traditional teaching methods (lectures, questions and answers). The second group was presented with real clinical situations and methods for solving them using the problem-based learning method. Week 2: Implementation of the simulation-based teaching method. For the second group, various clinical situations were created using simulators and virtual clinical situations, students tried to analyze these situations and develop practical skills. Week 3: In the second group, students carried out their independent work using the flipped classroom method and then worked with the teacher in the lesson. The first group performed exercises aimed at combining theoretical knowledge and practice in a traditional lesson.

Evaluation criteria of the study: The following criteria were established to evaluate the clinical skills of students in the experiment: Theoretical knowledge: Assessment of students' theoretical knowledge through tests. Practical skills : Measurement of clinical skills through practical exercises and simulations.

Quick Decision Making: Students demonstrated quick decision making skills through simulation-based lessons and PBL activities.

Research results: The results of the experiment were as follows :

Group 2 (innovative pedagogical methods): Students developed clinical skills more effectively. PBL and simulation methods significantly improved their ability to make quick decisions. Students also showed greater engagement in practical exercises and were able to effectively apply their knowledge in clinical situations.

Group 1 (traditional teaching methods): In this group, students achieved good theoretical knowledge, but achieved very limited performance in developing practical skills . Their ability to make clinical decisions was slowed down.

In conclusion, the importance of innovative pedagogical approaches in medical education is not limited to providing students with theoretical knowledge alone. These approaches allow them to develop clinical skills , increase critical thinking, train in teamwork, and prepare them to make quick and correct decisions in real clinical situations. Innovative pedagogical methods also provide modern and effective education for students through the use of technologies in the educational process. The results of the experiment showed that innovative pedagogical methods, especially simulation-based learning and PBL methods, effectively improve students' clinical skills. These methods help prepare students for real clinical situations, develop their ability to make quick and correct decisions. Innovative approaches increase student engagement in medical education and further improve practical skills.

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