

qilish har bir mamlakatning rivojlanish strategiyasining ajralmas qismi hisoblanadi. Shu sababli, ushbu sohada amalga oshirilayotgan ishlar nafaqat texnologik yangiliklar bilan bog‘liq, balki inson huquqlarining ustuvorligini ta'minlashdagi ijtimoiy mas'uliyatni ham ifodalaydi. Raqamli transformatsiya jarayonida fuqarolarning manfaatlarini birinchi o'ringa qo'yish orqali biz barqaror va adolatli jamiyat qurishga erisha olamiz.

NEW METHODS IN MEDICAL EDUCATION

Turakulov Vali Norkulovich

¹ Doctor of Philosophy (PhD), Emeritus Professor of Iryo Sosei University, DIRECTOR OF NAVOY BRANCH OF THE CENTER FOR TRAINING AND SPECIALIZATION OF SECONDARY MEDICAL AND PHARMACEUTICAL STAFF OF THE REPUBLIC, HEAD OF THE GENERAL MEDICAL SCIENCES DEPARTMENT OF NAVOI STATE UNIVERSITY OF SCIENCES

Nasullayev Fayzi Otabekovich

²He is a student of the Department of Pediatrics of the Medical Faculty of Navoi State University

Abstract: *The evolution of medical education necessitates integrating innovative pedagogical methods to enhance effectiveness and interactivity. Traditional educational approaches, such as lectures and practical sessions, must be augmented with modern technologies like simulation, virtual reality (VR), and problem-based learning (PBL). These methods create environments that mimic real-life medical scenarios, facilitating practical skill development. Simulation centers provide safe experiential learning, while VR technologies offer immersive educational experiences. PBL fosters independent thought and analytical skills essential for medical practice. Despite challenges in implementation, including financial costs and the need for instructor training, the benefits of these new methods in improving medical education outcomes are significant.*

Keywords

Medical Education

Simulation

Virtual Reality (VR)

Problem-Based Learning (PBL)

Interactive Learning

Educational Technology

1. Introduction

Educational processes in medicine must be more effective and interactive today. Traditional teaching methods (lectures and practical sessions) have played a crucial role in educating students, but today's technological advancements call for enriching them with new pedagogical approaches. Methods ranging from simulation and virtual reality to problem-based learning (PBL) help create conditions closer to real medical practice for medical students.

2. New Methods and Their Advantages

New teaching methods significantly enrich the educational process for students and help develop practical skills. The following are some of the most effective methods:

Simulation and Virtual Reality:

Simulation centers are among the most important innovations in medical education. Through simulation, students can practice surgery, intensive care, or hospitalization techniques in a safe environment. These simulation centers are especially valuable for learning complex surgical procedures. Virtual reality (VR) technology allows students to experience medical procedures in life-like situations, enhancing their skills and memory. Simulation prepares students for real conditions and provides valuable hands-on experience.

Problem-Based Learning (PBL):

The PBL model encourages students to think independently and analyze problems. Students taught through this method learn to find their solutions to real-life situations. Through group discussions, they can test their knowledge and develop analytical and logical thinking skills essential for diagnosis and treatment processes.

Interactive and Online Learning:

During the COVID-19 pandemic, online education expanded widely and made a significant impact on medical education. Through online platforms and virtual labs, students gained the opportunity to study remotely. Today, platforms such as Zoom and Google Meet allow for interactive lessons, and students can connect with patients via telemedicine. Remote learning frees students from geographical boundaries, giving them the chance to attend scientific conferences and seminars worldwide.

3. Experience and Results

Numerous studies have been conducted worldwide to evaluate the effectiveness of new methods in medical education. For instance, an experiment conducted at Yale University in the U.S. showed that students trained using simulation and VR technologies achieved better practical skills than those taught

through traditional methods. Additionally, studies in Canada demonstrated that students who used the PBL method achieved higher results in independent decision-making and problem-solving during complex diagnostic processes.

4. Challenges in Implementing New Methods

There are certain challenges in implementing new methods. One of the main issues is financial cost. Establishing simulation centers and VR technologies requires significant investment. Additionally, both instructors and students need to be prepared to adapt to new methods. Instructors need to be proficient in using the technologies, and students must quickly embrace the new learning approaches.

5. Conclusion

In conclusion, new methods in medical education offer students a higher quality and more engaging educational experience. Methods like simulation, VR, and PBL play a key role in preparing highly skilled professionals in medicine, and it is essential to continue enhancing these methods in the future. At the same time, successfully implementing these innovative methods requires resources and qualified pedagogical skills that align with the new approaches.

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