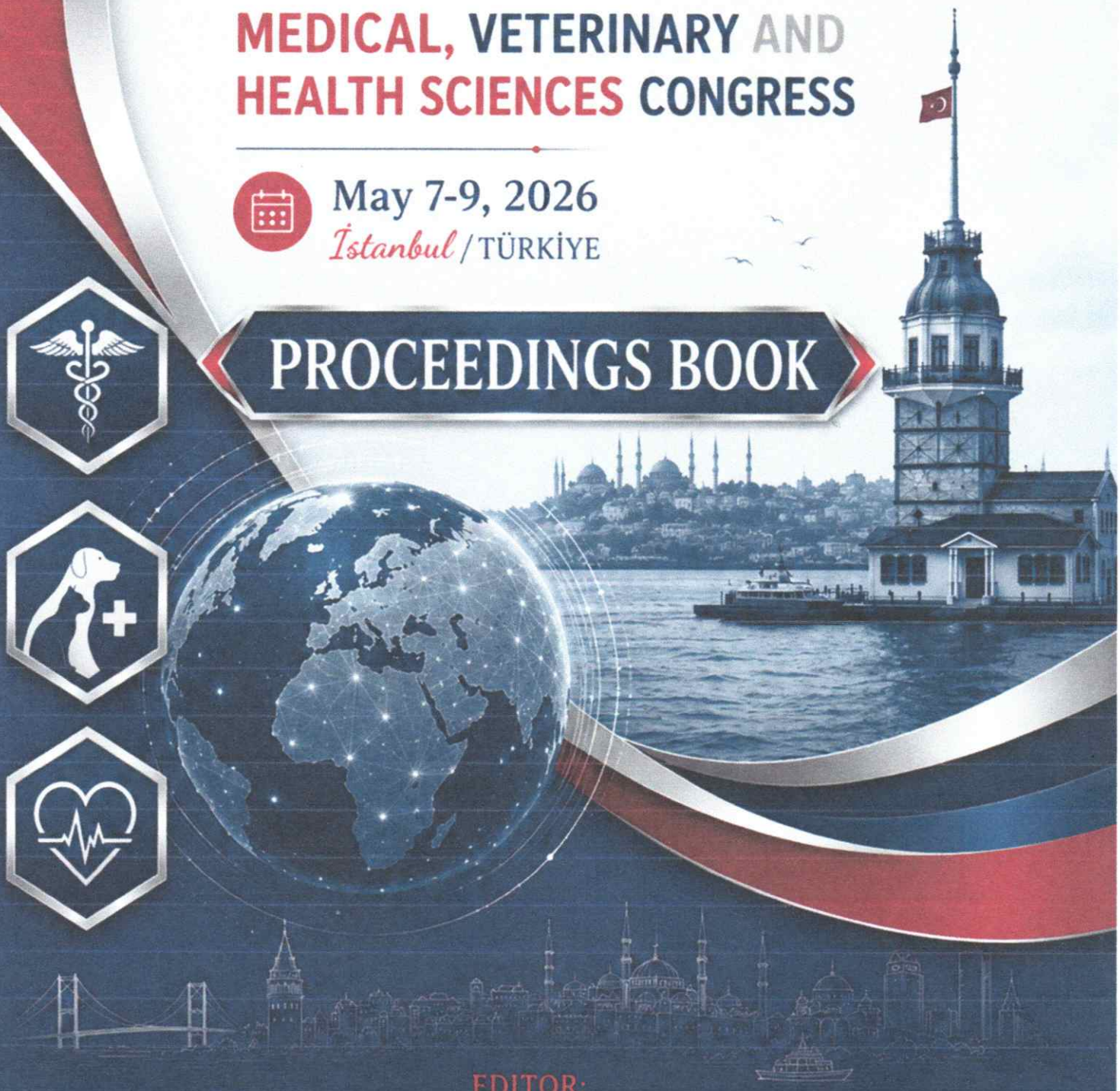
11th IMVHSC

INTERNATIONAL MEDICAL, VETERINARY AND HEALTH SCIENCES CONGRESS

May 7-9, 2026

İstanbul / TÜRKİYE

PROCEEDINGS BOOK



EDITOR:

Prof. Dr. Fadime ÇINAR

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THE ROLE OF INTERACTIVE METHODS IN DEVELOPING CLINICAL THINKING COMPETENCIES IN STUDENTS OF MEDICAL HIGHER EDUCATION INSTITUTIONS

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Annotation:

This article explores the importance of interactive teaching methods in medical education, focusing on real-case analysis, simulation training, and group discussions. These approaches help students develop clinical reasoning, decision-making skills, and professional competence by engaging them actively in learning processes that reflect real clinical practice. The paper also highlights the role of critical thinking in evaluating AI-based clinical data through the "Virtual Doctor – Real Solution" task. It concludes that interactive methods effectively integrate theoretical knowledge with practical skills and prepare students for real-world medical practice.

Keywords:

Medical education; interactive learning; clinical reasoning; simulation training; case analysis; group discussion; decision-making; artificial intelligence; professional competence.

In medical education, real-case analysis, simulation training, and group discussions play a special role in deepening students' knowledge, forming clinical thinking, and developing professional decision-making skills. These approaches bring the teaching process closer to real-life practice from artificial conditions, transforming the student from a passive knowledge recipient into an active participant and problem solver in a professional role. Real-life case analysis is a method of analysis based on a complex case that reflects clinical reality. This approach teaches the student to make a complete diagnostic assessment by correlating the patient's symptoms, laboratory and instrumental examination results, medical history, social background, and psychological factors. Case analysis is not just about remembering facts, but about thinking, drawing conclusions, and making informed decisions. Each student's decision is discussed, different perspectives are compared, and medical decisions are made based on consistent reasoning. This process creates conditions close to real life and prepares the student for the professional environment.

Simulation training, on the other hand, serves as an important platform to avoid mistakes in medical practice. They are organized on the basis of special mannequins, robotic patients, virtual programs or staged cases involving actors. Simulation allows the student to make quick decisions in a complex clinical situation, correctly plan the sequence of diagnostic and therapeutic actions, maintain team cohesion, and test communication skills. Such training

develops competencies such as psychological stability, stress management, teamwork, and reflective analysis, in addition to medical knowledge. The student practices in a clinical environment without the risk of making mistakes, which allows them to consolidate knowledge in a practical, not just theoretical, form. Analytical discussions - "debriefings" - that follow simulation training are the most powerful developmental stage of the learning process. In this process, the student reviews their actions, analyzes their mistakes, evaluates alternative options, and reflectively learns from their professional decisions.

Group discussions are one of the main forms of interactive methods and develop students' skills in exchanging ideas, arguing, critically analyzing, and developing alternative approaches. During a group discussion, each participant justifies their position, hears the views of others, and reconsiders their decisions. This method teaches students to communicate professionally, express their opinions politely, and engage in constructive criticism and self-evaluation. In particular, in a multidisciplinary approach, complex decisions arise that are comprehensively illuminated when students of different directions jointly analyze one case. Through the process of collective thinking, students experience clinical responsibility not only at the individual but also at the community level.

Clinical thinking can be deepened by combining interactive methods, problem-based learning, clinical simulations, virtual disease modeling, hypnopedia, and collaborative learning methods in medical education. Such modern teaching methods develop students' competencies in independent thinking, professional reflection, developing alternative solutions, and working in a team.

Interactive methods such as simulation training, clinical case studies, and OSCE, which are widely used in practice, not only reinforce students' theoretical knowledge but also prepare them for real clinical practice. For example, through simulation training, students practice providing emergency care in various emergency situations; and in the case study method, clinical situations are analyzed step by step and alternative diagnostic solutions are developed.

Interactive educational technologies form the principle of "student central figure" in students. On the basis of this principle, the student acquires knowledge not in a ready-made form, but through his active search, discussion and decisions. The teacher acts as a process manager, a guide to clinical situations, and a scientific and methodological assistant.

"Virtual Doctor - Real Solution" assignment

Imagine that, as a doctor, you receive a medical case summary (diagnosis, test results, estimated risks) based on artificial intelligence, which is based solely on numerical data about the patient. Based on this data, you need to make a clinical decision on the patient. However,

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when you communicate with the patient himself, you have doubts about this technological report. Now you will be asked: what kind of thought process happens in this case? What stages of clinical reasoning competence do you use? What questions, assumptions, negations and arguments arise? How do you critically analyze the information given by digital technology? Through this assignment, you will understand that clinical reasoning is not just about making decisions based on technical tools, but also about the ability to process digital information through human thought and compare it with the individual patient's condition.

The role of interactive teaching methods in medical education is that they are one of the most effective pedagogical mechanisms for combining theoretical knowledge and practical skills in future doctors, forming clinical competencies, and achieving professional maturity.

References:

1. Harden, R. M., & Laidlaw, J. M. (2017). *Essential Skills for a Medical Teacher: An Introduction to Teaching and Learning in Medicine*. Elsevier.
2. Cook, D. A., & Artino, A. R. (2016). Motivation to learn: An overview of contemporary theories. *Medical Education*, 50(10), 997–1014.
3. Issenberg, S. B., McGaghie, W. C., Petrusa, E. R., et al. (2005). Features and uses of high-fidelity medical simulations. *Medical Teacher*, 27(1), 10–28.
4. Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall.
5. Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Basic Books.
6. Eva, K. W. (2005). What every teacher needs to know about clinical reasoning. *Medical Education*, 39(1), 98–106.
7. Gaba, D. M. (2004). The future vision of simulation in health care. *Quality and Safety in Health Care*, 13(Suppl 1), i2–i10.
8. Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231.
9. Schmidt, H. G., Rotgans, J. I., & Yew, E. H. J. (2011). The process of problem-based learning. *Medical Education*, 45(8), 792–806.
10. Ericsson, K. A. (2004). Deliberate practice and the acquisition of expert performance. *Academic Emergency Medicine*, 11(11), 988–994.

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