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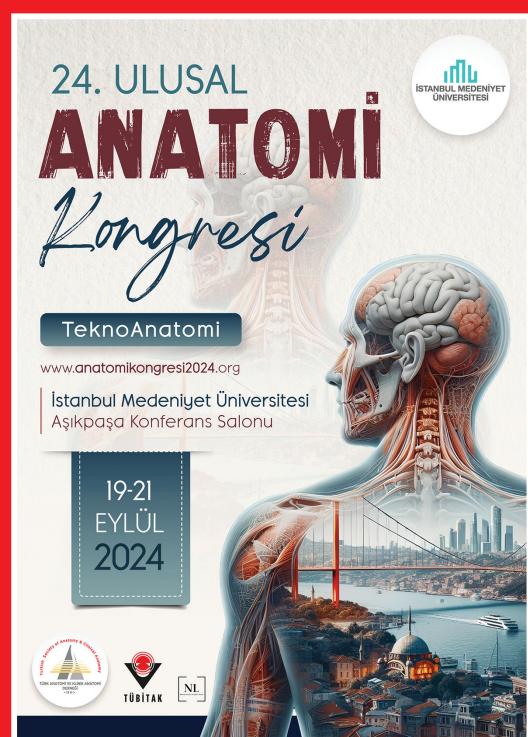
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OP-001

Abstract no: 16738

Abstract group: Anatomy and Innovation /
The Relationship between Anatomy and Technology

The power of simulation in medical education: an example of transformation in education at Bursa Uludağ University

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Objective: Today's developing technology is being used very effectively in the field of medical education, as it is in every field. The Center for Good Medical Practices and Simulation at Bursa Uludağ University is being used very effectively in technology-based education for pre- and post-graduation students. Based on this example, the aim is to examine and compare examples from around the world.

Methods: The published studies on medical and anatomical education have been examined and the technological facilities located in the centers where the studies are carried out and used for medical training have been evaluated.

Results: Study over the past 10 years has shown that advanced technology has been exploited in medical and anatomy education, especially in centers in the UK and Australia. Compared to global technological capabilities, the technological substructures and facilities at the simulation center within our institution have parallel features with the world.

Conclusion: The simulation center, which has been used very effectively in pre- and post-graduate education, has the capability to deal with examples in the world in terms of technological infrastructure and facilities. As a result, with its technological capabilities and innovative perspectives, medical education appears to be competitive with the world.

Keywords: anatomy, medical education, simulation

OP-002

Abstract no: 64819

Abstract group: Anatomy Education and Terminology /
Anatomy Education

The potential of AI-based chatbots in generating multiple-choice questions for medical education: an evaluation

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Objective: The study aims to evaluate the suitability of using AI-based chatbots (CBs) for generating multiple-choice questions (MCQs) in anatomy.

Methods: In this methodologically designed study, the first stage involved selecting four medical specialty examination (MSE) questions related to musculoskeletal radiology. Following this, 12 MCQs were generated using ChatGPT with two different prompts one prompt with Claude, creating four questions from each. The generated MCQs, along with the original exam questions, were compiled into four forms, each containing four questions from different generation techniques. These forms were evaluated using five-point Likert scales assessing the clarity, clinical relevance, presence of a single correct answer, adequacy of the information provided, and the logical coherence of the distractors.

Results: Each form was evaluated by two medical doctors, totally eight experts. The clarity, clinical relevance, presence of a correct answer, adequacy of information, logical coherence of the distractors, and total score were evaluated for each parameter, yielding the following scores: 4.5/4.38/4.38/4.25/4.25/21.75 for the MSE questions; 4.13/4.25/4.25/4.25/4.25/21.13 for the first ChatGPT prompt; 4.13/4.25/4.25/4.25/4.25/21.13 for the second ChatGPT prompt; and 4.13/4.25/4.13/4.13/4.38/21 for Claude. No significant differences were found across all evaluation parameters for the MCQs ($p>0.005$).

Conclusion: CBs can produce questions of comparable quality to those written by humans. AI tools offer a fast and effective means of generating the necessary questions for medical education. Given the heavy teaching workload and the importance of asking different questions for quality assessment each time, the use of CBs can significantly ease the burden on medical educators.

Keywords: artificial intelligence, medical education, chatbot, multiple-choice questions, question generation

OP-003

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Abstract group: Anatomy Education and Terminology /
Anatomy Education

Discrimination and difficulty indices of ChatGPT-generated multiple-choice questions in anatomy

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