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Letter to the Editor

# Medical education in the era of artificial intelligence: Emergence of the new Tower of Babel



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Dear Editor,

In the modern era, the entry of artificial intelligence into medical education has created a cultural and linguistic tapestry. In other words, the intersection of these two fields, like the legendary Tower of Babel\*, is a symbol of the diversity and complexity of language, communication, and culture. As a result, work and professional life in the medical education community have become increasingly exciting and confusing.

Originally, medical education is a form of social activity in a common society. One of its main goals is to facilitate the joining of its members into a community with the common goals of treatment and patient care, feeling safe, and sharing a common social fabric.<sup>1</sup>

However, as a result of the intersection of these two fields, a context has been created in which different stakeholders (physicians, educators, medical educationists, technologists) often speak diverse "languages", which can lead to inconsistencies in goals and expectations, fragmentation of knowledge and various interpretations and ultimately jeopardizing improvement of patient care as the ultimate goal of medical education.

In this regard, I would like to share my experience. In a meeting between members of the AI board with medical teachers and medical educationists, I realized that neither we understand their language nor they ours! They interpreted modern medicine in the framework of Cartesian ontology, which considers the human body as a machine that needs to be studied using scientific logic, and the physician as a technician whose task is to repair it. In this situation,

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withdrawing us in favor of them and vice versa is a dangerous zero-sum game. So this needs serious attention.

To address this challenge, first, the integration of AI into health professions education requires a re-evaluation of how students are trained as future health care providers. Gen Z students must not only master basic and clinical skills, but also develop in data science, machine learning, and the ethical implications of AI in health professions education.<sup>2</sup>

Additionally, we need to enhance interdisciplinary and inter-professional collaboration and create a unified framework for medical education that includes ethical principles,<sup>3</sup> and AI literacy. Initiatives such as; encouraging thoughtful conversations about differences in perspectives,<sup>4</sup> between educators, medical educationists, health care professionals, and technologists to bridge the language gap (human language) and (technical language), creation and development of guidelines and best practices to ensure consistency in AI-based medical education in universities/ schools of medical sciences, developing flexible curricula can be solutions in this regard. With these initiatives, we can turn the challenges of the intersection of medical education and AI into opportunities and ensure that the new Tower of Babel does not lead to confusion of languages, rather, it leads to an integrated and comprehensive understanding that enhances medical education and ultimately improves patient care.

## Note

\* A biblical analogy to illustrate the feeling of being surrounded by people speaking different languages and unable to understand the words others are using.

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#### References

 Cruess RL, Cruess SR, Steinert Y. Medicine as a community of practice: implications for medical education. Acad Med 2018; 93(2): 185-191. https://doi.org/10.1097/ACM.00000000000001826.  Masters K. Artificial intelligence in medical education. Med Teach 2019; 41(9): 976–980. <a href="https://doi.org/10.1080/0142159X.2019.1595557">https://doi.org/10.1080/0142159X.2019.1595557</a>.

- Daungsupawong H, Wiwanitkit V. ChatGPT and the future of medical education: correspondence. J Taibah Univ Med Sci 2023; 19(2): 248. https://doi.org/10.1016/j.jtumed.2023.11.007.
- Albert M, Hodges B, Regehr G. Research in medical education: balancing service and science. Adv Health Sci Educ Theory Pract 2007; 12(1): 103-115. <a href="https://doi.org/10.1007/s10459-006-9026-2">https://doi.org/10.1007/s10459-006-9026-2</a>.

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