

LETTER

Beyond efficiency: critical reflections on ChatGPT's role in healthcare simulation design

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Dear Editor-in-Chief,

The recent article examining ChatGPT's potential in healthcare simulation development offers intriguing insights into artificial intelligence (AI) as a support tool for simulation-based education (SBE) [1]. The authors demonstrate that non-subject matter experts can produce usable simulations with ChatGPT, significantly reducing development time compared to traditional methods. While this efficiency is impressive, I would like to raise several critical points about AI-driven simulation that I believe are essential for advancing a nuanced understanding of ChatGPT's role in healthcare education.

First, while ChatGPT proved time efficient, the results highlighted limitations in achieving clinical accuracy and scenario depth – particularly when working without professional healthcare knowledge. Simulation educators are trained not only in simulation pedagogy but also in clinical realism and specific technical nuances that AI lacks the contextual grounding to replicate fully. The observed gaps in scenario quality raise a question: To what extent can AI-generated content be trusted in high-stakes training, where clinical nuances significantly impact the learning experience? While the study acknowledges these limitations, I urge the authors to explore further how ChatGPT's output might inadvertently shape learners' clinical decision-making if educators lack the capacity to rigorously validate each AI-generated simulation.

Additionally, I am curious about the potential for adaptive simulation scenarios with ChatGPT. Given that clinical education requires learners to navigate complex, evolving patient situations, it would be interesting to investigate whether AI can support multi-pathway scenarios that adapt based on learner responses. This dynamic functionality, however, remains outside ChatGPT's current design. Would the authors consider future research on how ChatGPT or similar tools might simulate these 'choose your own adventure' formats in healthcare training? Exploring ChatGPT's adaptability could further clarify its role in constructing responsive simulations that mimic real-time clinical decision-making.

Furthermore, the article emphasizes the efficiency gains of using ChatGPT, yet it is worth considering the ethical implications of AI dependence. With growing reliance on technology, how do we ensure that AI serves as an adjunct rather than a replacement for expert insight? As educational institutions face resource pressures, we risk undermining simulation's pedagogical quality if AI becomes a shortcut rather than a complementary tool. I would be interested in the authors' perspective on balancing cost-effectiveness with the quality and integrity of SBE content.

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In summary, the authors' work is commendable for initiating a dialogue on AI in SBE, and their findings highlight both the promise and pitfalls of ChatGPT in simulation writing. However, there is a pressing need to explore the boundaries of AI's contribution in this field. I look forward to the authors' reflections on these considerations and to seeing how future research will expand our understanding of AI's optimal role in healthcare simulation.

Sincerely,
Mohammed Al-Hassan

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Reference

1. Doe J, Smith A, Brown B. Investigating the use of ChatGPT in healthcare simulation development: an initial study. *Journal of Healthcare Simulation*. 2023;8(3):123–134. doi: [10.54531/wjgb5594](https://doi.org/10.54531/wjgb5594)