Al-Rafidain J Med Sci. 2023;4:50-51.

**DOI**: <a href="https://doi.org/10.54133/ajms.v4i.110">https://doi.org/10.54133/ajms.v4i.110</a>



## **Editorial Letter**

## Online ISSN (2789-3219)

## ChatGPT and Nursing Education: Challenges and Opportunities

Ahmed Lateef Alkhaqani\*

Ministry of Health, Al-Najaf Direction, Al-Sadder Teaching Hospital, Al-Najaf, Iraq

Received: 25 March 2023; Accepted: 29 March 2023

\* Corresponding author: Ahmed L. Alkhaqani. Ministry of Health, Al-Najaf Direction, Al-Sadder Teaching Hospital, Al-Najaf, Iraq; Email: alkhaqani50@gmail.com

Article Citation: Alkhaqani AL. ChatGPT and nursing education: Challenges and opportunities. Al-Rafidain J Med Sci. 2023;4:50-51. doi: https://doi.org/10.54133/ajms.v4i.110

© 2023 The Author(s). Published by Al-Rafidain University College. This is an open access article under the CC BY-NC-ND license. <a href="http://creativecommons.org/licenses/by/4.0/">http://creativecommons.org/licenses/by/4.0/</a>

Generative Pre-trained Transformer (ChatGPT) was created by the artificial intelligence company Open AI® in 2022. It is a conversational chatbot capable of asking follow-up questions, testing definitions, and challenging assumptions. It offers nearly instantaneous, comprehensive, and logical text responses in any style and genre, undetectable by current plagiarism software [1]. ChatGPT responded promptly with a well-thought-out, convincing, and human-like response and was able to effectively respond to subsequent prompts [2]. Consideration was given to academic integrity and privacy, and the opportunities and challenges presented by this technology for nursing and health science education. Educators must quickly adapt in order to assure staff training and comprehensive policies. The nursing and medical disciplines must choose whether or not to respond to ChatGPT. Fear of technology and its potential impact on higher education may contribute to avoidance. By avoiding ChatGPT in higher education, educators avoid the danger of privacy and security issues that could have a negative impact on education. The use of ChatGPT is viewed as a direct threat to academic integrity by educators in the fields of nursing and health sciences [3]. Patients are prone to ask ChatGPT for information on health concerns. Nurses and other health professionals must be familiar with ChatGPT in order to support and educate patients. In addition to scientific writing, ChatGPT can assist physicians by saving time and allowing them to focus on delivering patient care [4].

ChatGPT can be utilized to educate and evaluate nurses. This requires rethinking assessment in order to emphasize process over outcome, such as grading essays as the ultimate product. Academic integrity is imperiled by ChatGPT. To reduce the risk of inappropriate use, institutions must employ academic integrity rules, detection software, and ChatGPT training for staff. ChatGPT can be utilized fairly and in accordance with students' skill levels, but instruction is required. Institutions of higher education must quickly adapt to assure staff training and comprehensive policies. However, health professionals and educators must recognize the rapid development and scalability of ChatGPT and ensure a flexible assessment method to keep up with this AI technology [5]. ChatGPT generates responses that resemble human-to-text inputs using a large language model. While some experts believe that ChatGPT can revolutionize medical writing by making it a fast and efficient process, many others reject it out of concern for its effects on education and research. It lacks critical thinking and presents redundant and illogical information. Similarly, the use of ChatGPT in scientific papers raises ethical issues, medicolegal and copyright concerns, and inaccurate content. It could assist with composing papers utilizing evidence from online search engines, but it could not conduct a comprehensive literature search or perform a critical analysis and discussion. It is also susceptible to abuse, and its extant training data is obsolete. In lieu of providing an original blueprint, ChatGPT can

evaluate content and rewrite the text. However, a growing concern is the dearth of clinical reasoning and critical thinking in student papers [6]. A concern is that students can easily use ChatGPT to deceive themselves into exam work, which could result in the loss of their ability to generate original ideas and present appropriate arguments. However, ChatGPT can assist with medical education and clinical decision-making [7]. According to Dr. Biswas's article, ChatGPT can extract information, assist in literature searches, and generate a preliminary draft for the medical researcher; however, its use in medical research remains controversial. Others argue that it can generate new hypotheses and aid in data analysis, contrary to the opinion of some experts who believe it can be readily used for writing papers that lack clinical reasoning and critical thinking. However, it cannot replace human intelligence and critical reasoning. We require a human intellect and a set of policies to cross-check the data generated by such AI systems and to regulate their access [8]. According to Bin et al., ChatGPT can strengthen scientific writing, increase research equity and adaptability, and be beneficial to healthcare research. It can efficiently analyze datasets, generate code, conduct literature evaluations, free up time for experimental design, and support drug discovery and development. It can also be used to answer queries about cirrhosis and hepatocellular carcinoma. However, there are concerns regarding the educational use of ChatGPT [6]. O'Connor revealed that students can easily cheat on examinations using ChatGPT, resulting in a loss of original ideas and an inability to present valid arguments. Additionally, privacy and security concerns are also associated with using ChatGPT in higher education. It has the potential to revolutionize medical writing by making it a fast and time-efficient process, despite these concerns. However, it is essential to use ChatGPT ethically and responsibly to avoid negative consequences [9]. ChatGPT assists researchers in locating articles, summarizes their conclusions, and emphasizes areas of uncertainty during the review process. It can aid in the writing process by suggesting titles, compiling the methodology section, defending sample size, and describing data analysis techniques. It is also useful for editing, although the results are not always satisfying. Chatbots can assist in the writing process, but they should not replace human experience, discernment, personality, or responsibility. A chatbot-generated text may lack subtle syntax and word choice, be less precise and contain inconsistencies, and appear to be written by a human. Ethical considerations could also limit the use of chatbots for scientific writing, as humans are

capable of plagiarizing by duplicating the findings, statements, and written works of others without citing the original authors. However, it is unacceptable to use software to reformulate sentences and writing to reduce the incidence of plagiarism. AI tools can increase the number of publications without increasing experience, which can raise ethical concerns when employing professionals [4]. In conclusion, ChatGPT has the potential to revolutionize nursing education and research by streamlining the process. However, its impact on medical education and research is still debated. While it can assist with medical education and clinical decision-making, it is not a substitute for human intellect and critical thinking. Therefore, it is essential to use ChatGPT with caution and responsibility.

## **REFERENCES**

- Open AI®. 2023. Available from: https://openai.com/ (Accessed Mar 25, 2023).
- 2. Aswin A, Ariati C, Kurniawan S. Artificial intelligence in higher education: A practical approach. *J High Edu Policy Manag*. 2022;1-4. doi: 10.1080/1360080X.2022.2156088.
- 3. Archibald MM, Clark AM. ChatGTP: What is it and how can nursing and health science education use it? *J Adv Nurs*. 2023. doi: 10.1111/jan.15643.
- Salvagno M, Taccone FS, Gerli AG. Can artificial intelligence help for scientific writing?. *Crit Care*. 2023;27;75. doi: 10.1186/s13054-023-04380-2.
- Sallam M. ChatGPT utility in healthcare education, research, and practice: Systematic review on the promising perspectives and valid concerns. *Healthcare*. 2023;11(6):887.
  - doi: 10.3390/healthcare11060887
- Bin AT, Munaf U, Ul-Haque I. The future of medical education and research: Is ChatGPT a blessing or blight in disguise? *Med Educ Online*. 2023;28(1):1-2. doi: 10.1080/10872981.2023.2181052.
- 7. Wingard J. ChatGPT: A Threat to Higher
- Education? Forbes. 2023. Available from: <a href="https://www.forbes.com/sites/jasonwingard/2023/01/10/chatgpt-a-threat-to-higher-education/?sh=5275514d1e76">https://www.forbes.com/sites/jasonwingard/2023/01/10/chatgpt-a-threat-to-higher-education/?sh=5275514d1e76</a> (Accessed in 2023 Mar 25).
- 8. Biswas S. ChatGPT and the future of medical writing. *Radiology*. 2023;223312. doi: 10.1148/radiol.223312.
- O'Connor S, ChatGPT. Open artificial intelligence platforms in nursing education: Tools for academic progress or abuse? *Nurse Educ Pract*. 2023;66:103537.
  - doi: 10.1016/j.nepr.2022.103537.