



Guest Editorial

Artificial intelligence-assisted medical writing: With greater power comes greater responsibility

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The use of technology and artificial intelligence (AI) in medical publishing is not new. Researchers and publishers have been using it for grammar correction, managing references, editing tools, medical evidence synthesis in the form of systematic reviews, and plagiarism check software to name a few.^[1,2]

In November 2022, an AI-assisted natural language processing tool by the name of Chat Generative pre-trained (GPT) took the internet by the storm. Chat GPT, (where GPT stands for: GPT transformer) which is an evolution of a chatbot, was programmed to simulate human conversations and responses to prompts.^[3] It gained immense popularity since its introduction, and soon the news related to its writing abilities for school essays, research publications, and even passing MBA examination at the reputed University of Pennsylvania, Whorton, USA was the talk of the day.^[4]

However, issues pertaining to its misuse, ethical concerns, and copyright issues were also raised. It has been seen as a potential threat to students' creativity and writing skills. With the use of such tools, the fine line between originality and a plagiarized write-up is overwhelmingly blurred as it produces a document as good as an "original" just taking prompts from the keywords put. For example, on putting the phrase "write an editorial on use of AI in medical writing" in the ChatGPT prompt box, it produced a 317 word long document within a matter of seconds [Figure 1]. It is very tempting, as one feels that the work is done instantly, without putting any efforts, but on the same hand, the user should keep this in mind that it is just processing a grammatically correct collection of words and sentences, without an actual human thought process or any references/citations to validate its verity.

Interestingly, in January 2023, Nature reported on two articles which listed ChatGPT as an author, and included an affiliation and email address for the "non-human" author, though now Nature has updated its policy "which prohibits naming of such tools as a "credited author on a research paper," because "attribution of authorship carries with it accountability for the work, and AI tools cannot take such responsibility."^[5] Similarly, many publication houses have come up with guidelines to the authors regarding the extent of use of such AI tools in the manuscript, along with its justification.^[6] The World Association of Medical Editors have recently laid down recommendations for the use of Chatbots in medical publishing. The recommendations say that these language processing tools cannot be eligible for authorship of any manuscript, authors of the manuscript will be responsible for all data generated by AI tools, authors should be transparent about usage of such tools, and the editors should have updated software to detect the use of such AI-assisted tools.^[7] Turnitin, the Plagiarism check software service provider, has already come up with solutions that can

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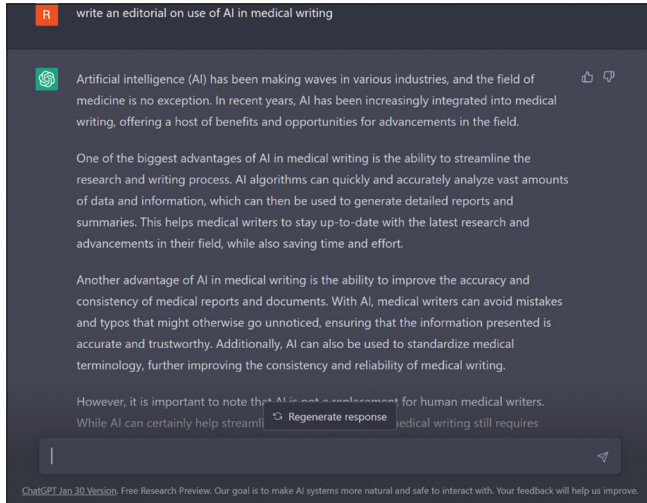


Figure 1: Screenshot showing the artificial intelligence-generated text.

detect AI-assisted writing and AI generated by tools such as Chat GPT.^[8] Another crucial aspect revolving around the AI-assisted scientific writing is ownership of the generated text and is still a matter of debate.^[9]

The use of AI in medical writing can neither be denied or stopped completely, but whenever done, it should be justified, and largely for handling the technical aspects such as manuscript arranging, reference management, and plagiarism check. Many publication houses have allowed its use in manuscript only restricted to the methodology section where the methods are pertaining to any specific analytical techniques, and whenever used, its use should be adequately acknowledged.^[10] The non-human chatbots cannot be “authors” as authorship not only means

producing text but also warrants credibility, accountability, and transparency.

REFERENCES

1. Razack HI, Mathew ST, Saad FF, Alqahtani SA. Artificial intelligence-assisted tools for redefining the communication landscape of the scholarly world. *Sci Ed* 2021;8:134-44.
2. Blaizot A, Veetil SK, Saidoung P, Moreno-Garcia CF, Wiratunga N, Aceves-Martins M, *et al.* Using artificial intelligence methods for systematic review in health sciences: A systematic review. *Res Synth Methods* 2022;13:353-62.
3. Available from: <https://www.openai.com/blog/chatgpt/> [Last accessed on 2022 Feb 13].
4. Available from: <https://www.nbcnews.com/tech/tech-news/chatgpt-passes-mba-exam-wharton-professor-rcna67036> [Last accessed on 2023 Feb 13].
5. Stokel-Walker C. ChatGPT listed as author on research papers: Many scientists disapprove. *Nature* 2023;613:620-1.
6. Hosseini M, Rasmussen LM, Resnik DB. Using AI to write scholarly publications. *Account Res* 2023 Jan 25:1-9.
7. Zielinski C, Winker M, Aggarwal R, Ferris L, Heinemann M, Florencio Lapeña J, *et al.* WAME Board. Chatbots, ChatGPT, and Scholarly Manuscripts: WAME Recommendations on ChatGPT and Chatbots in Relation to Scholarly Publications; 2023. Available from: <https://www.wame.org/page3.php?id=106> [Last accessed on 2023 Feb 13].
8. Available from: <https://www.turnitin.com/blog/sneak-preview-of-turnitins-ai-writing-and-chatgpt-detection-capability> [Last accessed on 2023 Feb 19].
9. Available from: https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html [Last accessed on 2023 Feb 13].
10. Fourth International Conference on Machine Learning. Clarification on Large Language Model Policy LLM. Available from: <https://www.icml.cc/conferences/2023/llm-policylegends> [Last accessed on 2023 Jan 28].

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