## Letter to the Editor

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# Correspondence on 'Is ChatGPT a "Fire of Prometheus" for Non-Native English-Speaking Researchers in Academic Writing?'

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We read the article titled 'Is ChatGPT a "Fire of Prometheus" for Non-Native English-Speaking Researchers in Academic Writing?' with interest [1]. This article explains the utility of large language models (LLMs), such as ChatGPT, in supporting non-native English-speaking researchers with academic writing. LLMs can serve as personal English teachers, assisting non-native Englishspeaking researchers in overcoming the difficulties they frequently encounter when writing scientific manuscripts in English, especially in the introduction and discussion sections of submissions [2]. However, there are drawbacks to employing LLMs for text generation, such as hallucinations, plagiarism, and privacy concerns. To mitigate these vulnerabilities, authors should double-check the generated

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content by comparing it with trusted sources to ensure accuracy, use language similarity detectors, and avoid entering important information into the LLM prompts. The fact that LLMs are better suited to editing and revising text than to generating large amounts is argued [3]. Although LLMs can be used for compiling initial drafts of papers, the crucial role of human authors in the creative process remains [3]. Although LLMs can help shape documents, only humans should undertake the ultimate review, validation, and approval [2]. Journal regulations on the use of LLMs may differ; however, the emphasis is on transparency in revealing the use of LLMs [3-5].

The risks of hallucinations, plagiarism, and privacy issues are weaknesses in employing LLMs in academic writing. LLMs generate text based on the patterns and examples on which they have been trained, which may result in erroneous or illogical data. This is particularly concerning when producing research publications, because the accuracy and dependability of the information are critical. Furthermore, LLMs may generate content that is comparable to that in previously published works, creating issues regarding inadvertent plagiarism. Furthermore, because LLMs store data, privacy risks are associated with entering sensitive information into them. Therefore, many international publishers and related authorities have issued recommendations to authors for the appropriate use of LLMs [3-7]. According to Elsevier's standards [3], authors should only utilize generative artificial intelligence (AI) and AI-assisted technologies in the writing process to improve the readability and language of their work. As AI can provide an authoritative-sounding output that is incorrect, incomplete, or prejudiced, it should be used with human monitoring and control, and the authors should carefully review and amend the outcome. The work's content is ultimately responsible for and accountable to the creators. Specific journals and organizations may respond differently to AI use. For example, the Korean Journal of Radiology encourages the proper application of generative AI to facilitate the dissemination of significant scientific knowledge through publications while preventing scientific misconduct and violations of publication ethics [4]. The policies of the Radiological Society of North America journals [5] clearly note that authors should be able to state that their articles contain no plagiarism, including text and graphics generated by AI. Humans must guarantee

that any quoted content is properly attributed to the full citations. The authors must credit all sources, including chatbot-generated content. The accountability of submitted work is required for authorship credit. Referring to the World Association of Medical Editors recommendations, Zielinski et al. [6] stated that offering such material for publication, regardless of how it was prepared, is potentially scientific misconduct. Similarly, the authors must verify that any referenced material is appropriately credited with full citations and that the sources cited support the chatbot's claims. Because a chatbot may be programmed to exclude sources that contradict the ideas represented in its output, it is the authors' obligation to locate, review, and include such counterpoints in their articles. Finally, the International Committee of Medical Journal Editors recommends that AI does not fulfill the criteria of authorship and cannot be acknowledged as the author of an article [7].

In terms of future directions, it may be better to use LLMs for editing and refining content rather than relying on them to generate enormous amounts of material. Furthermore, journal regulations must address the use of LLMs in research manuscripts. Maintaining scientific integrity and ethical standards in academic writing requires transparency by revealing the use of AI assistance. To overcome the unique issues experienced by non-native English-speaking scholars, additional research and development of LLMs specifically customized for academic writing should be pursued. As AI language models improve, ethical controls and constraints must be implemented to prevent the spread of false information and dangerous ideas. With the continuous advancement of AI technology, we must update and adhere to best practices for its use in medical research and publishing.

### **Conflicts of Interest**

The authors have no potential conflicts of interest to disclose.

#### **Author Contributions**

Conceptualization: all authors. Investigation: all authors.



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## REFERENCES

- 1. Hwang SI, Lim JS, Lee RW, Matsui Y, Iguchi T, Hiraki T, et al. Is ChatGPT a "Fire of Prometheus" for non-native Englishspeaking researchers in academic writing? *Korean J Radiol* 2023;24:952-959
- 2. Koga S. The Integration of large language models such as ChatGPT in scientific writing: harnessing potential and addressing pitfalls. *Korean J Radiol* 2023;24:924-925
- 3. Elsevier. Publishing ethics: the use of generative AI and AI-assisted technologies in scientific writing [accessed on October 7, 2023]. Available at: https://www.elsevier.com/ about/policies/publishing-ethics
- Park SH. Use of generative artificial intelligence, including large language models such as ChatGPT, in scientific publications: policies of KJR and prominent authorities. *Korean J Radiol* 2023;24:715-718
- Radiological Society of North America (RSNA). Editorial policies: guidelines for use of large language models [accessed on October 7, 2023]. Available at: https://pubs.rsna.org/page/ policies
- 6. Zielinski C, Winker MA, Aggarwal R, Ferris LE, Heinemann M, Lapeña JF, et al. Chatbots, generative AI, and scholarly manuscripts: WAME recommendations on Chatbots and Generative artificial intelligence in relation to scholarly publications [accessed on July 10, 2023]. Available at: https://wame.org/page3.php?id=106
- 7. International Committee of Medical Journal Editors. Recommendations [accessed on July 10, 2023]. Available at: https://www.icmje.org/recommendations