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Limitations of Using Generative Artificial Intelligence in Writing Scientific Articles: Producing Low-Quality Manuscripts

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We have previously highlighted that the use of fabricated references, a bias toward Western-centric literature, and complex authorship considerations pose significant limitations on the use of generative artificial intelligence (AI) in writing scientific articles (1, 2). However, other challenges persist. One such issue is the production of manuscripts characterized by low quality (3). As we have previously noted, one potential application of generative AI lies in the generation and development of novel ideas (4).

Nevertheless, the current utility of generative AI in this domain faces various constraints. Consequently, this task should be performed either by experienced researchers or under their direct supervision, accompanied by an extensive review of the relevant literature (5). Furthermore, employing generative AI for idea generation may inadvertently lead to the production of low-quality manuscripts. Unfortunately, such papers are often easily published in journals commonly referred to as "mega-journals" (6).

Mega-journals are characterized by broad, interdisciplinary scopes, are typically published online with open access, and maintain high acceptance rates. Consequently, they can publish a vast number of articles in each issue. While mega-journals have emerged relatively recently and employ editorial peer review, their business models—often relying on article processing charges (APCs)—can lead to high profitability. As a result, they may adopt less rigorous editorial peer review processes that focus exclusively on methodological soundness. This approach can lead to the publication of low-quality papers that, while technically sound in their methodology, may lack broader scientific impact or innovation (7, 8).

There is now a growing concern that the use of generative AI to produce low-quality manuscripts for publication in mega-journals may threaten the integrity of the global body of scientific knowledge. The solution lies in the transparent and responsible use of generative AI by members of the scientific community. Furthermore, researchers must strive to avoid the production and submission of low-quality papers. Finally, institutional evaluation systems should prioritize the quality of research and publications over mere quantitative metrics (6).

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References

1. Rezaeian M. Limitations of Using Generative Artificial Intelligence in Writing Scientific Articles: Use of Fake Citations and Tendency Towards Western Texts. *JRUMS* 2025; 24 (9): 773-4

2. Rezaeian M. Limitations of Using Artificial Intelligence in Writing Scientific Articles: Complex Considerations in Authorship. *J Rafsanjan Univ Med Sci* 2026; 24 (10): 887-8.

3. Cohen JF, Moher D. Generative artificial intelligence and academic writing: friend or foe? *J Clin Epidemiol* 2025; 179: 111646.

4. Khalifa M, Albadawy M. Using artificial intelligence in academic writing and research: An essential productivity tool. *Computer Methods and Programs in Biomedicine Update* 2024; 1; 5: 100145.

5. Rezaeian M. Utilizing Generative Artificial Intelligence in Research. *J Rafsanjan Univ Med Sci* 2026; 25 (1): 1-2.

6. Kayaalp ME, Zaffagnini S, Mont MA, Karlsson J, Reider B, Ayeni O, Heyse T, Madry H, Herbst E, Milano G, Musahl V, Becker R, Hirschmann MT. Preserving Scientific Integrity in Academic Publishing: Navigating Artificial Intelligence, Journal Policies, and the Impact Factor as a Quality Indicator. *J Arthroplasty* 2025; 26: S0883-5403(25)00954-4.

7. Björk BC. Have the "mega-journals" reached the limits to growth? *PeerJ* 2015; 26;3:e981.

8. Björk BC. Evolution of the scholarly mega-journal, 2006-2017. *PeerJ* 2018; 9;6:e4357.

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