## **Editorial**

## Why Peer Review?



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With the explosion of open-access journals, is peer review suffering? Is there a real threat to the quality of scientific journal publications? Can peer review counteract and tackle the looming challenges?

Peer review, as defined, is the process of subjecting an author's scholarly work, research, or ideas to the scrutiny of others who are experts in the same field.[1] Although the practice of editorial peer reviewing became general as early as after World War II, the institutionalization of the process took place only in the 20th century.[2] After that, its functions were consolidated into quality control as a screening mechanism to verify scholarly work, legitimize scientific research, and self-regulate scientific communities.[1]

Why peer review? Peer review is intended to improve the quality of a manuscript that is deemed suitable for publication. It acts as a filter to ensure that only quality research is published, especially in reputable journals, by ascertaining the research undertaking's originality, validity, and significance. [1] To ensure quality review, scientific experts, scientists with a more general knowledge base, and anyone with competence and expertise in the subject areas that the journal covers are invited to conduct the scientific undertaking.[3]

Peer reviewing may appear as tedious work that entails the following steps: 1) design review for appropriateness, 2) significance and originality of findings, 3) correctness of referencing and review of scientific errors, if any, and 4) grammatical check. Therefore, why do reviewers accept the task? Conspicuous on the grounds to engage in peer review is to update oneself and advance one's research in the latest development of a specific research area. Others utilized the scheme to build associations and

were later hired as editors. Often, peer reviewing is merely completing an academic duty or simply assisting a colleague to do the task.[3]

Once again, with the mushrooming of opendeadlines become journals, nightmares. How will the act of peer reviewing be affected? Foremost, standardization of peer review is needed. Some journals operate as single-, double-, or triple-blind with nonstandard styles and practices. Because of volume, it is now tough to find qualified reviewers who are themselves already loaded with papers to review. Journals owned by publishers go for profit and engage in a commercial mode of research paper acceptance. The subscription model decreases leading to less accessibility for good papers. Moreover, often, there are no incentives for peer reviewing.[4]

A new and real challenge in peer reviewing is amidst us and that will be the application of AI-LLM (Artificial Intelligence – Large Language Model). Hosseine & Horbach [5] identified potential benefits of these tools' efficiency and productivity during the peer review and editing process. While the new tool can potentially help in "reviewer fatigue", they remarked that 'the fundamental opacity of LLMs' training data, inner workings, data handling and development process raised concerns about potential biases, confidentiality, and reproducibility of review reports. Nevertheless, given the significance of peer reviews in the existing scholarly publication landscape, exploring challenges and opportunities of using LLMs seems urgent in the review process.

A parallel point is in regard to peer reviewing of abstracts appended to conventions upon which LLMs can be applied just as well. As it turns out, the threat to integrity of peer review is in the influence 1336 Editorial

of authors' institutional prestige on the evaluation of their work (affiliation bias)[6]. It is unknown at this point whether using LLMs in peer review will increase or reduce application bias.

Nonetheless, with all the challenges and limitations, engagement in peer review must be endowed with a noble philosophy — "spend time on work that will lead to the most lives saved!" [4].

In regard to threading the ethical paths of all the JMUST publication processes, inclusive of peer reviewing, we are pleased to inform our readers that the Committee on Publication Ethics (COPE; publicationethics.org) has officially accepted our membership application (19 Feb 2024; Journal of Medicine, University of Santo Tomas, Reference:

reclAW1ca4UVQnWvp). COPE will be our guiding light and a reminder that we are duty-bound to juxtapose the ethics of publication practices, truly embodied to start with, in the institution we belong and the publisher of JMUST.

In this present JMUST April 2024 issue, we have the following articles included: two observational study articles; one article each for case report, conjoint analysis, systematic review, and medical education. Additionally, two were viewpoint articles and one news article. As editors, we remain grateful to all our editorial board members and peer reviewers (internal and external), who have shared their expertise and time for us to complete this issue for publication of JMUST.

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## **REFERENCES**

 Tennant JP, Ross-Hellauer T. The limitations to our understanding of peer review. Res Integr Peer Rev [Internet]. 2020;5(1). Available from: http://dx.doi.org/10.1186/s41073-020-00092-1.

- Burnham JC. The evolution of editorial peer review. JAMA [Internet]. 1990;263(10):1323. Available from: http://dx.doi.org/10.1001/jama.1990.03440100023003
- Kelly J, Sadeghieh T, Adeli K. Peer review in scientific publications: Benefits, critiques, & A survival guide. EJIFCC. 2014;25(3):227–43.
- Mckeever M. The problem of peer review is the most important philosophical problem. *Metaphilosophy* [Internet]. 2019;50(3):286–95. Available from: http://dx.doi. org/10.1111/meta.12361.
- Hosseini M, Horbach SPJM. Fighting reviewer fatigue or amplifying bias? Considerations and recommendations for use of ChatGPT and other large language models in scholarly peer review. Res Integr Peer Rev [Internet]. 2023;8(1). Available from: http://dx.doi.org/10.1186/ s41073-023-00133-5.
- von Wedel D, Schmitt RA, Thiele M, Leuner R, Shay D, Redaelli S, et al. Affiliation bias in peer review of abstracts by a large language model. JAMA [Internet]. 2024;331(3):252.

Available from: http://dx.doi.org/10.1001/jama.2023.24641.

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