

Commentary

Open-Access Publishing and the Reviewer Crisis: Rethinking Incentives for Quality Peer Review

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Open-access journals often charge article publication fees, typically amounting to thousands of USD or Euros. Fee waivers are generally limited to manuscripts from low-income countries. The quality of published manuscripts, whether in open-access or APC-based journals, depends heavily on external reviewers and associated editors. Their critical role ensures originality, rigorous methodology, and impactful research. However, reviewers receive minimal rewards, such as a certificate, acknowledgment, or discounts on future publications. These incentives are usually insufficient to attract senior researchers, who frequently decline the numerous review requests they receive daily. As a result, the task often falls to junior researchers with fewer publications and limited experience in high-impact research. This lack of adequate recognition and tangible benefits for reviewers poses challenges in maintaining high-quality peer review standards. Considering the significant revenue journals earn from APCs, particularly in prestigious gold open-access models, offering substantial financial incentives to reviewers could be a prudent strategy. Such measures would encourage senior experts to contribute their time and expertise, ensuring a more rigorous and high-quality review process.

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Perspective

Scientific journals are the primary source of scientific information. In the traditional model, readers paid to access articles, authors received no payment, and publishers held the copyright. This model faced challenges in the 90s due to high costs and declining subscribers. In the 2000s, with the rise of the

Internet and open access, the "author pays" model emerged. Authors or their institutions now pay Article Processing Charges (APCs), allowing articles to be freely accessible with proper credit given to the authors ^[1].

In the present era, many journals, particularly those with high h-indices, have embraced gold open access as their preferred publishing model for manuscripts. The primary aim and advantage of gold open access lie in ensuring that the published version of the article is permanently and freely available online for anyone, anywhere to access and read. Undoubtedly, this democratizes access to research findings, enabling researchers from low and medium income countries to engage with and benefit from the articles, thereby facilitating the global exchange of medical knowledge. Simultaneously, this approach significantly enhances the visibility and impact of the articles. With unrestricted access, there is a greater likelihood of the articles being cited by other manuscripts. This increased citation potential not only contributes to the overall H-index of the journal but also enhances the recognition and influence of the authors whose work is cited ^[2].

Open-access journals typically require article publication charges, often amounting to several thousand USD or Euros. Although waivers for article publishing fees are available, they are usually granted under limited conditions, such as for manuscripts originating from low-income countries. Additionally, these journals generate substantial profits from publishing online manuscripts ^[3]. Naturally, they include various costs for managing different departments, including editorial, scientific integrity, production, indexing, media/press relations, as well as billing and accounting ^{[1][3]}.

The quality of manuscripts published in both open-access journals and those with APCs largely centres on the efforts of external reviewers and associated editors. Their role is critical in ensuring that manuscripts exhibit high levels of originality, precise methodology, and significant impact ^[4].

Every day, many researchers and academic professors receive numerous emails from medical journals soliciting their expertise to review submitted manuscripts. These journals vary in prestige, ranging from those indexed in well-known databases like Scopus, Web of Science, and PubMed, to others indexed in less prominent platforms ^[5]. Regardless of their indexing status, all these journals request reviewers to evaluate the manuscripts, providing feedback on their methodology and potential impact, and ultimately recommending whether they should be published or not.

The benefit for these reviewers is often minimal, with journals sometimes offering modest incentives such as a certificate acknowledging their role as a reviewer, inclusion in the list of journal reviewers, or

even a discount on future publication in the same journal. However, these incentives primarily serve as a form of recognition and contribute to the journal's marketing efforts, rather than providing any financial return to the reviewers themselves.

The lack of tangible benefits for reviewers often leads many experts and senior researchers to decline the numerous requests they receive daily to review manuscripts in both indexed and non-indexed journals. The mere recognition offered in the form of a PDF certificate or acknowledgment in the reviewers' list is typically insufficient to incentivize experienced professionals to commit their time and expertise to this task. Consequently, the pool of reviewers willing to accept such requests may predominantly consist of junior researchers with fewer publications and less experience in high-impact research. A PDF certificate or acknowledgment in the reviewers' list may hold value for a junior researcher's curriculum vitae or promotion prospects, but it typically carries little significance for a senior researcher. This dynamic can lead to junior researchers evaluating manuscripts submitted to prestigious journals by senior expert researchers, sometimes stemming from well-funded projects.

The significant improvement of manuscripts evaluated by junior researchers may be limited, particularly when the manuscript is submitted by another junior researcher or even by experts and senior researchers. This limitation could potentially impact the quality of published articles, even in prestigious indexed journals. The current scenario is not conducive to scientific and medical progress, potentially impeding the timely and appropriate publication of manuscripts crucial for advancements in the 21st century.

Many platforms opt to enlist senior researchers and professors to evaluate manuscripts before submission to journals. The insightful comments and recommendations provided by these experts substantially enhance the quality of these manuscripts, often securing their publication in prestigious indexed journals. Importantly, these platforms offer economic incentives to these experts, which serve as a significant motivator for them to conduct thorough reviews.

Conclusion

Given the substantial benefits of APCs to many journals, particularly gold access and prestigious ones, it would be prudent for them to allocate significant economic incentives to reviewers. This approach would help attract senior researchers and experts to evaluate and review submitted manuscripts, similar to dedicated review platforms. Such a strategy should be seriously considered by major publishers to address the current challenges and improve the quality of manuscript review processes.

Statements and Declarations

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