EDITORIAL

Paid publishers business or Open access: Is the solution worse or better than the problem?

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The business model of paid publishers for scientific journals has been criticized for various reasons, including the potential for financial gain to take precedence over the advancement of science. Some argue that this model restricts access to critical scientific research, particularly for those who cannot afford expensive journal subscriptions, hindering the progress of science[1].

Paid publishers often require authors to transfer their copyright to the publisher, which can limit the ability of researchers to share their work freely or use it for further research. Additionally, paid publishers may prioritize publishing research likely to generate more revenue rather than scientifically critical analysis, with less likely to generate profit[2].

Furthermore, the high costs of journal subscriptions can lead to libraries and universities having to limit their access to specific journals, which can restrict the ability of researchers to access necessary scientific research. This creates an imbalance in the scientific community, where researchers from wealthy institutions and countries have greater access to scientific knowledge. In contrast, researchers from low-income countries and institutions are left behind[3].

Open-access (OA) journals offer an alternative to the paid publishing model, allowing for free and open access to scientific research. OA journals are accessible to anyone with an internet connection because they are typically indexed and searchable online, making them more widely available than traditional journals that require payment. This can be particularly beneficial for researchers and students in developing countries or at smaller institutions that may not have the financial resources to subscribe to expensive academic journals. The OA features can help to accelerate scientific progress and promote collaboration and innovation across different fields of study.

Consequently, open-access articles are often read and cited more frequently than those traditional subscription-based journals. This increased visibility can help improve the impact of a researcher's work and their visibility within their field. Additionally,open-access journals often have a larger audience than traditional journals, as researchers, policymakers, and the general public worldwide can access them. This can help increase the visibility and impact of research and promote greater engagement and collaboration across different fields and disciplines. Many of the recognized scientific publishers have begun their partial migration towards open-access (hybrid journals) and have even generated new OA publications[4,5].

Open-access publishing can promote innovation and interdisciplinary collaboration by allowing researchers to freely access and build upon each other's work, leading to discoveries and advances in science and technology. OA can help to accelerate scientific progress and lead to discoveries and breakthroughs while helping break down silos and encourage ideas exchanging and knowledge across different disciplines. Overall, while open access may primarily benefit readers by providing them with free access to research, it can also benefit authors, including increasing the visibility and impact of their work, reaching new audiences, and supporting the broader goals of scientific discovery and knowledge dissemination[6].

However, OA publishers are not the panacea, at least not entirely for authors. Most OA journals involve Article Publication Charge (APC) fees for authors. The APC model of open access, among other controversies, is part of the broader and increasingly global OA's ethics debate. Interestingly, from 2011 to 2021, the *per-article* average increased from 904 USD to 1,626 USD. This increase could indicate that, currently, the authors choose to publish in more expensive journals[7]. This eagerness to publish is part of the "Publish or perish" policy, encouraged by the increased use of this indicator as a main criterion for promotion and recruitment in academic institutions[8,9].

Again, with the highest APC fees, researchers from developing countries are the most affected. No matter how much access to scientific information, their distribution will be defined by the journal they can afford[10]. Faced with this new reality, the leading scientific publishers, i.e., Wiley, Taylor & Francis, or Spring, would promote policies that ensure access to the publication process at referential prices or free of cost for researchers from countries without the resources. At the same time, government public policies should be required in which academic institutions have access to budgets that allow them to pay the APC in recognized journals[11].

On the other hand, the growing need for researchers to publish their research has given rise to predatory journals. Predatory journals claim to be academic or scientific but do not follow standard peer review practices, editorial oversight, or ethical publishing. These journals often exploit the open-access publishing model by charging authors fees for publication without providing the usual quality control and editorial services associated with reputable academic journals[12]. Publishing in predatory journals can have severe consequences for authors, including damage to their reputation, loss of funding, and a negative impact on their career prospects. The

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Figure 1. Open-access journals often provide greater accessibility to research and knowledge, which can lead to increased dissemination and impact of research.

proliferation of scientific articles of dubious quality can generate confusion in state institutions or serve as the basis for pressure groups of marked dogmatism (such as anti-vaccine movements or climate change deniers)[13].

If you have already submitted your article to a journal that you suspect may be predatory, you can check the journal's credentials by looking at its website and examining its editorial board, publication policies, and previous publications. You can also search for reviews or ratings of the journal from other researchers or check if it is listed on reputable databases such as the Directory of Open Access Journals (DOAJ), Scopus or the Web of Science[14]. It is important to note that indexing is no guarantee of impact. Many factors can influence the quality and impact of a journal, including the rigor of its peer-review process, the reputation of its editorial board, the relevance and impact of the research it publishes, and other factors. Despite being indexed in databases is not a guarantee of the quality or impact of a scientific journal; it can be an indicator of the journal's credibility and visibility within the academic community.

Summarized, while the business model of paid publishers for scientific journals has the potential to restrict access to necessary scientific research and hinder the progress of science, alternative models, such as open-access journals, should be explored to ensure that scientific research is accessible to all and can advance the development of science for the benefit of all. However, like any publication,open-access journals must adhere to ethical considerations to maintain the integrity and quality of research. Open access became a growing movement that will likely continue significantly impacting scholarly publishing in the coming years. Parallely, publishers and institutions must generate policies capable of closing the gap that differentiates researchers to ensure that not only the dissemination but also the generation of knowledge are devoid of demographic bias. Open-access publications have generated a new challenge for researchers and institutions, who must know that some predatory journals do not respect ethical standards, harming the scientific community. Predatory journals can cause negative consequences: society relies on high-quality articles to create public policies, as support in court cases and, in particular, to improve public health. We must remember that scientific integrity matters and that ethical principles in journal publishing make a big difference in the relationship between researchers and journals.

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