



VIEW POINT

BETWEEN SCYLLA AND CHARYBDIS: ACADEMIC PUBLISHING DURING THE ONGOING PANDEMIC

Pathiyil Ravi Shankar^{1,*}

¹IMU Centre for Education, International Medical University, Bukit Jalil, Kuala Lumpur, Malaysia

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***Correspondence to:** Pathiyil Ravi Shankar, IMU Centre for Education, International Medical University, Bukit Jalil, Kuala Lumpur, Malaysia.

Email: ravi.dr.shankar@gmail.com

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ABSTRACT

The ongoing coronavirus pandemic has led to an increased volume of submissions. Many journals have special issues and accelerated peer review for these articles. Maintaining the speed and rigor of the process during the pandemic can be challenging. There have been prominent retractions, predatory journals may have exploited the situation and topics other than the pandemic may be neglected. Peer reviewers are overworked and are also busy providing patient care. We should navigate carefully between ensuring timely publication and ensuring the quality of the published manuscripts. In this article I put forward twelve suggestions to support this process.



The ongoing coronavirus disease (COVID-19) pandemic has caused widespread social and economic disruption. As of 14th August 2021, the virus has infected 206.6 million individuals and caused over 4.3 million deaths.¹ The pandemic has also changed publishing practices with a recent analysis in the journal Nature mentioning around 4% of the global research output was dedicated to the pandemic in 2020.² Estimates from different databases showed between 100000 to 200000 articles related to COVID were published in 2020. Journals developed faster peer review and publication for COVID articles. Analysis of the Scopus database (as of 1 August 2021) revealed 210183 COVID-19-related publications that included 720801 unique authors and 23520 authors were among the top 2% of their scientific subfield based on a career-long composite citation indicator.³ Hence it can be concluded that scientific journals played an important role in disseminating scientific information during the pandemic.

Increased volume of submitted manuscripts: The pandemic requires quick sharing of information among scientists, academicians, policy makers and the public globally. Rapid, updated information is the key to remaining a step ahead of the pandemic. Academic journals are among the most important means of sharing objective, scientific information.

Most journals have shifted to electronic systems for the various stages of the publishing lifecycle even before the pandemic. The pandemic has also led to a large increase in submissions to scholarly journals.⁴ Along with the different reasons mentioned for this increase in research productivity, I would like to add the absence of commuting to and from work which can result in substantial time saving in many instances, which can be used for research pursuits. Many journals have devoted special issues and put in place an accelerated peer review process for COVID-19 articles. Most of these articles are free to access, and some journals have also waived article processing charges for these submissions.

Speed and rigor of peer review: On the other hand, there have been concerns about the speed and rigor of peer review of both COVID-related and other articles submitted to journals. A study that examined 294 COVID related articles published in 16 journals found a median time from receipt to online publication of 20 days for COVID articles compared to 102 days for non-COVID publications.⁵ There have been articles about the 'publishing pandemic' during the virus pandemic. There is a necessity of rapid data to guide our response to the pandemic and at the same time a responsibility for critical analysis of the data before translating it into action.⁶ The authors suggest

making the deposition of research in preprint servers the default option, encouraging, and strengthening prepublication peer review of these preprints and the use of social media tools to make this process quicker and easier.

Disadvantages of the publishing pandemic: The issue of data quality and standards of the peer review process has come into the spotlight due to retraction of articles from high profile journals like the New England Journal of Medicine and Lancet. Having open-data policies requiring the deposition of data in open-access repositories and stricter editorial and peer review policies can make retractions less likely.⁷ Predatory journals and publishers have exploited the situation and accepted more COVID-related publications leading to greater profits.⁸

Important topics other than COVID may be neglected due to the preferential treatment given to pandemic-related research.⁹ Also, peer reviewers who are vital elements of the quality control process may be overworked and also be involved in crucial front-line efforts against the pandemic reducing the time available for reviewing manuscripts. The voluntary nature of peer review means reviewers must balance this important task with other pressing demands and rewarding and recognizing peer reviewers is important.¹⁰

I put forward twelve suggestions to facilitate quick and good quality peer review and publication of manuscripts during the pandemic and beyond (Table 1).

Table 1: Suggestions to encourage timely publication of quality manuscripts during the pandemic and beyond

S. No.	Suggestion	Pros	Cons
1	Strongly encourage all manuscripts including original research, research protocols, reviews, letters, commentaries, viewpoints, and opinions to be deposited on preprint servers so that prepublication peer review and possible adoption of recommendations by others can be facilitated	This will facilitate early dissemination of research and encourage it to be widely available without restrictions.	Not all journals accept the deposition of research on preprint servers. Researchers may be concerned about issues of copyright and intellectual property.
2.	For original research the deposition of de-identified source data on open-access repositories can be made a requirement for publication.	This will ensure other researchers can analyse the data and check the results and support greater transparency of the research.	The process of deidentifying the data should be thorough otherwise it is possible, identity of subjects, and their personal information may be compromised.
3	The timelines for all stages in the publication process from receipt of the manuscript to editorial processes, peer reviews, and final acceptance should be publicly displayed along with the published article.	This will ensure readers, authors and potential authors have an idea about the expected timeline for publishing in the journal. Journals may be more likely to ensure timely publishing.	The drive for quicker publishing may compromise the standards of peer review and manuscript quality. The most suitable reviewers may not be always available to review a manuscript quickly.
4.	Peer reviews can be made public, and the peer review should be published along with the article and can also be indexed.	The readers and others involved can gauge the quality of the reviews and reviewers can be rewarded for their efforts with a published report.	Reviewers may be less likely to criticize authors if the review process is made public. Some reviewers may also be less likely to be involved in the review process.
5.	Peer reviewers can be paid an honorarium which may vary depending on the speed and quality of the review. Criteria for good quality peer reviews should be made publicly available.	Reviewers can be compensated for their time and effort and will devote more effort to the process.	Some persons may be motivated to review for financial reasons and reviewers may be tempted to review more manuscripts affecting the review quality.
6.	Journals may need to explain possible reasons for delay in publication for unusually delayed articles (more than two standard deviations above the mean publication time for that journal).	This may make the journals accountable. The speed of publishing may be quickened.	Not all journals may have the resources to comply with the requirement. Delay may be due to factors external to the journal.
7.	Articles should be published online within a week of acceptance and there should be no wait for a particular issue to be published.	This will ensure accepted research is quickly published and accepted manuscripts do not have to wait to be published.	Some journals may not have the resources to ensure this.
8.	There should be an option for readers to provide comments on all published articles which can be vetted and then published.	The process of post-publication peer review is strengthened, and articles can be reviewed throughout the lifecycle.	Personal factors may sometimes motivate and influence the comments though with proper vetting this can be addressed.

9.	Manuscripts can include a short commentary from the Academic Editor handling the manuscript or from the Editor-in-Chief.	The relevance of the article to the field or the situation can be highlighted. The quality can also be commented on.	This may put additional responsibilities and tasks on these individuals.
10.	All articles should include a layperson summary varying between 75 to 300 words for the public to understand the research/manuscript.	Laypersons will better understand the importance of science and scientific research. The prevailing negative attitude toward science can be reduced.	If not properly drafted and vetted the summary can mislead the lay reader.
11.	The strengths, limitations and generalizability of the article should be highlighted.	This will help readers make better decisions about the applicability of the research to their situation.	
12.	Research into areas other than COVID should not be neglected during the pandemic.	This will ensure that research into areas other than COVID is also reviewed and published quickly.	The massive increase in number of publications during COVID-19 makes it difficult for journals to cope.

Redundancy of research could be a problem during a fast-evolving situation like COVID-19. Possible reasons can be lack of awareness of research already conducted and submitted to journals, the slow nature of the review process and lack of access to full text of publications. Research can be deposited in preprint servers to ensure quicker dissemination, the publication process can be quickened, and handling editors at journals may be able to evaluate a publication for redundancy more quickly. Different key evidence sources for COVID-19 have been created providing a quick overview about the published information on different aspects/areas of the pandemic, and

areas where there are gaps in knowledge requiring further research.¹¹ Many measures adopted during the pandemic like movement restrictions, lockdowns, and closure of factories and other institutions have widespread and severe consequences and scientific evidence should be created and used to guide these and other decisions. Work is required on generating reliable, unbiased evidence of their effectiveness. We should navigate carefully between Scylla and Charybdis— ensuring timely and quick publication of good quality manuscripts. This challenge which should be accepted by all stakeholders in scientific publishing.

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