



Letter to the Editor

Research publications during public health emergencies

Dear Editor,

At the time of global public health emergencies, such as the current 2019 coronavirus disease outbreak (COVID-19) [1], research articles on the topic are appearing at an ever-accelerating rate [2]. While the PubMed bibliographic database is arguably the most convenient and comprehensive online resource for accessing peer-reviewed biomedical literature, there are other sources to consider when timely information is a critical concern.

With the initiative put forward by the Wellcome Trust in response to the Zika virus outbreak in 2016 [3], various major publishers and organizations have committed to make research findings relevant to global public health emergencies available as rapidly and openly as possible [Table 1]. With this, researchers can benefit from timely and free access to all relevant peer-reviewed research publications, including those otherwise accessible by subscription only.

A notable difference in the way of publishing research results between now and the past is the increased embracement of preprints by researchers in the biomedical field. On the one hand, preprints can dramatically increase both the speed and the visibility of research by posting reports online before a formal peer-review process. An article on the discovery and potential origin of COVID-19 posted on *bioRxiv* on January 23 has received over 206,000 downloads and was mentioned by 69 news outlets within a month [4]. On the other hand, they can open up the possibility of trading off accuracy with immediacy as well as a concern for misuse or misinterpretation. A case in point was the publication of an article on *bioRxiv* that claimed to find “uncanny similarities”

between the new coronavirus and HIV [5]. While the article was swiftly retracted by the authors within 2 days after it was scrutinized by the scientific community, this was not fast enough to prevent the incorrect information from spreading through social networks.

Preprints are undoubtedly an efficient venue for scientific communication, especially during public health emergencies. Nevertheless, it is imperative to remember that they are not validated through peer-review. Medical researchers should maintain extra vigilance when reading and citing preprints. Frontline medical professionals should not to rely on them to guide their clinical practice. Last but not least, journalists have a responsibility to remind readers, the differences between preprints and published articles. Sensational and misleading reports can have the potential to further aggravate the already panic and chaotic situation.

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Conflicts of interest

There are no conflicts of interest.

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Table 1: Free to access coronavirus disease 2019 (COVID-19) resources with full-text biomedical research articles

Resources	Website
Journal	
British Medical Journal	https://www.bmj.com/coronavirus
The Lancet	https://www.thelancet.com/coronavirus
The New England Journal of Medicine	https://www.nejm.org/coronavirus
Preprint repository	
bioRxiv	https://www.biorxiv.org/
medRxiv	https://www.medrxiv.org/
SSRN	https://www.ssrn.com/index.cfm/en/coronavirus/
Publisher	
Elsevier	https://www.elsevier.com/connect/coronavirus-information-center and https://www.sciencedirect.com/search/advanced?date=2020&tak=Coronavirus%20OR%20%20%222019-nCoV%22%20OR%20%22COVID-19%22&articleTypes=REV%2CFLA
Springer nature	https://www.springernature.com/gp/researchers/campaigns/coronavirus
Wiley	https://novel-coronavirus.onlinelibrary.wiley.com/

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