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Guest Editorial

An Alert to COVID-19 Literature in Predatory Publishing Venues



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ABSTRACT

The COVID-19 pandemic, which has led to a flood of papers and preprints, has placed multiple challenges on academic publishing, the most obvious one being sustained integrity under the pressure to publish quickly. There are risks of this high volume-to-speed ratio. Many letters, editorials, and supposedly “peer reviewed” papers in ranked and indexed journals were published in a matter of days, suggesting that peer review was either fleeting or non-existent, or that papers were rapidly approved by editors based on their perceived interest and topicality, rather than on their intrinsic academic value. In academic publishing circles, the claim of “peer review”, when in fact it has not been conducted, is a core characteristic of “predatory publishing”, and is also a “fake” element that may undermine efforts in recent years to build trust in science’s budding serials crisis. While the world is still centrally focused on COVID-19, the issue of “predatory publishing” is being ignored, or not being given sufficient attention. The risks to the scholarly community, academic publishing and ultimately public health are at stake when exploitative and predatory publishing are left unchallenged.

Many researchers, strapped for time and with personal and professional lives in disarray, are witnessing an unprecedented volume of published work related to COVID-19. According to NCBI’s LitCovid (Chen, Allot, & Lu, 2020), the number of publications listed at PubMed related to COVID-19 appears to have plateaued, with 2500 publications published in May 11–17, and 2486 in May 18–24, totaling 16,371 papers already. Separately, Fraser et al. (2020) report on the publication of in excess of 6000 preprints, which are non-peer reviewed documents, mainly at *bioRxiv* and *medRxiv*, between January 1 and April 30, related to COVID-19. If one considers that such documents, which are directly related to public health and well-being, have not been peer reviewed, it is surprising to note how widely some of them have been cited, many dozens or several hundreds of times, as can be observed in Table 1 of Fraser et al. (2020). Translated, when citing preprints, academics and media are relying on and trusting the content of non-peer reviewed documents, i.e., that have likely not passed a rigorous stress test by experts in that field, even though they may have been open to critique and commentary from the public.

A risk of false information, misinformation or fake information thus exists, amplified by the fact that many COVID-19-related papers are open access and thus free for the public to access. If one considers that this explosion in literature is directly affecting human lives and public health, astute academics need to be able to sift through pro-preprint propaganda, as well as poorly conducted peer review and editorial processing in peer reviewed journals, in order to be able to distinguish valid from invalid research. One excellent example of these risks pertains to the use, or abuse, of chloroquine and hydroxychloroquine to treat COVID-19 (Pastick, Okafor, Wang, et al., 2020). Members of the public, young students, early career researchers, clickbait-hungry media outlets, or academics or that are unable to critically assess the academic and scientific content, and flaws, of biomedical literature, are at greatest risk of being carriers of misinformation, fueled by social

media-based propaganda.

To some extent, there are checks and balances in place to deal with fake information, such as open public scrutiny for preprints, ethical guidelines to screen out a first wave of poor science, strict peer reviewers and editors who can critically assess the complexities of biomedical research related to epidemics, virology, public health and so many other fields linked to COVID-19. However, the assumption that all peer review is rigorous, or that all peer reviewers and editors are strict or astute is clearly not accurate because peer review is imperfect and porous (Teixeira da Silva & Dobránszki, 2015), and bad science can filter through. This is made worse by the possibility that bad science and poor peer review may be rewarded such as on Publons, a reviewer “recognition” site (Teixeira da Silva, 2020). If lucky, bad science might be detected during post-publication peer review, then subjected to post-publication corrective measures such as errata or retractions. Yet, there is surely a slice of the COVID-19 literature that has been given the “peer-reviewed” stamp that has either not been peer reviewed, or possibly superficially peer reviewed, truths that might never be known. Such literature, or superficially conducted research, rushed under the guise of “urgent” research, or that has been offered pole position over other equally important research, poses a threat to academia, the integrity of the COVID-19 information stream, and even to public health because it may cause more harm than good. As eagle-eyed critics and post-publication academics and members of the public begin to dissect the COVID-19 literature, some of these flaws may be revealed. Several of these issues are not unique to the COVID-19 era, but as Bell and Green (2020) point out in their editorial, the pandemic is serving as somewhat of a catalyst, amplifying ills, weaknesses and problems in academic publishing to levels possibly never seen before in biomedical publishing.

Then there is the unpalatable issue of predatory publishing that few are discussing, and that may have taken a back seat of attention as the

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pandemic rages on globally. Many qualities and behaviors characterize predatory publishing, but ultimately, it is an unscrupulous abuse of the trust, scrutiny and ethics of the scholarly process that would most generally characterize a “predatory” entity, but make it difficult to differentiate it from an exploitative one (Teixeira da Silva, Dobránszki, Tsigaris, & Al-Khatib, 2019). In many ways, the threat that COVID-19 has brought to current peer reviewed- and preprint-based publishing platforms, and the level of poor science that is starting to emerge, suggests that “predatory” qualities are beginning to express themselves as a direct result of the urgent (and rapid) desire to publish COVID-19-related papers. However, predatory publishing has become an indistinguishable shade of publishing gray (Grudniewicz, Moher, Cobey, et al., 2019) that affects both subscription and open access journals and publishers, so COVID-19 has in some way deepened the risk of predatory publishing. A mix of bad science, sloppy peer review, superficial editorial handling, and exploitative behavior, have provided fertile ground for predatory publishing to expand and thrive, even among indexed journals. Extreme characteristics such as blatant fraud, plagiarism, data falsification, or fake peer reviewers, authors, or institutions are the most eye-catching and thus easiest to identify (Teixeira da Silva, 2017). It is the more subtle forms of predatory publishing that make them difficult to detect, and which threaten the entire publishing landscape, even more so now that global academia has been distracted with and by COVID-19, and possibly for many months to come.

As one extreme example,¹ a COVID-19 “research article” that claims to be peer reviewed, and whose DOI is invalid, carries 38 pages of apparent concocted pseudo-science almost totally unrelated to COVID-19. This paper was written by a team of most likely seven pseudonymous or fake authors that use two fake academic institutions (California South University and the American International Standards Institute).² This “paper” cites 348 references which are 100% self-citations, most likely to frivolously boost the metrics of Google Scholar and ResearchGate profiles of the lead author “Alireza Heidari”. Such brazen attacks on academic integrity, supported by equally fake or unscholarly publishers that accepted this pseudo-science within a handful of days, should send a loud and very scary message to global academia that the integrity of their own valid research may gradually

be eroded by the ability of fake, clearly disruptive, anti-science pseudo-academics and equally corrupted publishers to proliferate this type of fake science, unchallenged, and unthreatened.

Declaration of competing interest

The author declares no conflicts of interest.

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¹<https://openaccesspub.org/jvat/article/1290> (Received 16 Mar 2020; Accepted 19 Mar 2020; Published 21 Mar 2020; Alireza Heidari, Angela Caissutti, Maria Henderson, Katrina Schmitt, Elizabeth Besana, Jennifer Esposito, Victoria Peterson (2020) Recent new results and achievements of California South University (CSU) BioSpectroscopy Core Research Laboratory for COVID-19 or 2019-nCoV treatment: diagnosis and treatment methodologies of “coronavirus”. *Journal of Current Viruses and Treatment Methodologies*, 1(1): 3–41. doi:10.14302/issn.2691-8862.jvat-20-3275 (CC-BY license).

²<https://blogs.sciencemag.org/pipeline/archives/2018/02/21/down-the-rabbit-hole-with-alireza-heidari> (21 February 2018; last accessed: 2 June 2020).