Repercussions of the COVID-19 pandemic for science and for the management of the Jornal Brasileiro de Pneumologia

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Since the WHO declared infection with the novel coronavirus (COVID-19) to be a pandemic, on March 11, 2022, there have been unprecedented relevant developments in various areas, including health, politics, economics, and science.1 Although the number of cases of COVID-19 and COVID-19-related deaths has decreased significantly over the last year, the short- and long-term impacts of the pandemic have been impressive. Worldwide, there have been more than 626 million cases of COVID-19, resulting in more than 6.56 million deaths; in Brazil alone, more than 34.8 million cases have been reported and there have been more than 687,000 COVID-19-related deaths.2 Pulmonary involvement was and continues to be the leading cause of hospitalization and death among patients with COVID-19.2,3

Over a short period of time, there were dramatic advances in the science related to COVID-19, those advances representing a determining factor for the control of the pandemic, with progressive reductions in the number of cases, the severity of those cases, and the number of deaths.4,5 Due to the urgency of the situation and the significant increase in the number of submissions, there was a need to respond rapidly to all of the challenges, which presented themselves in an accelerated manner:6,5 On November 1, 2022, PubMed searches for “COVID” and for “COVID” AND “Brazil” identified 304,207 and 9,497 manuscripts, respectively.7,8 Various strategies were essential to meet the demand in the management of journals during COVID-19, including those related to the field of respiratory medicine, with the objective of streamlining the process for each manuscript, from its submission through the steps of editorial review, peer review, editing, revision, publication, and dissemination.5,9 In this context, it is important to highlight the arduous and remarkable work of the editorial teams and reviewers of journals in the area of respiratory medicine during the pandemic. Other relevant advances resulting from the COVID-19 pandemic include the expansion of national and international research partnerships, the development and structuring of research centers, and open access to published articles on the topic, a fundamental aspect of providing universal access to information.

For journals focusing on pulmonary and respiratory medicine, the significant impact on the number of submissions was accompanied by a significant increase in the number of citations of COVID-19-related articles, which certainly explains, in part, the fact that the impact factors (IFs) of many such journals increased in 2022, as evidenced in the Journal Citation Reports database maintained by Clarivate Analytics.10 The question is whether the effects of COVID-19 on the IFs of journals will persist for a prolonged period of time. It is important to remain attentive to the quality and relevance of submissions, including those related to long COVID, as well as to the number of citations.

There are some unfavorable aspects of the scientific production related to COVID-19. There has been an excessive number of published articles on COVID-19 in all fields, including that of respiratory medicine. Many articles have not presented consistent novel findings, rather reproducing those of previous studies; others have been of poor scientific quality, whereas others were case reports or case series.4,6 In addition, the rush to publish articles on the topic might have created a risk of reducing the scientific rigor in their evaluation, resulting in lower scientific quality of some articles.5,9 There was also a need to publish errata and retractions of some manuscripts because of methodological problems related to databases and results.5,11,12 Therefore, it is essential to stand firm against the pressure to publish without adopting rigid criteria in all steps of the editorial process, even in situations of epidemiological urgency. In addition to the obvious scientific repercussions, it should be emphasized that the publication of articles related to the pandemic can have an impact on the implementation of public policies in various areas, especially in the area of health care. Another noteworthy difficulty faced by many journals, including the Jornal Brasileiro de Pneumologia (JBP), was that of finding reviewers, mainly due to the large volume of articles submitted. There has also been much discussion regarding the overall difficulty of properly recognizing and valuing the work of reviewers, in order to make the act of reviewing articles more attractive. Another negative aspect is the intense pressure that many researchers felt to publish studies during the pandemic, mainly due to greater competitiveness, which might have caused anguish and resulted in burnout, generating an exacerbated feeling of frustration among those who failed to publish.13

The repercussions of COVID-19 for the JBP were also quite significant. From the beginning of the pandemic until November 1, 2022, 1,453 manuscripts were submitted to the JBP, of which 365 (25.1%) were about COVID-19. The overall rejection rate for articles submitted to the JBP during that period was 73%, reaching 80% for those with a COVID-19 theme. The turnaround time between the submission of an article and the initial decision of the
editor was reduced from 30 days to 23 days during the COVID-19 pandemic. During the pandemic, 384 articles were published in the JBP, of which 75 (19.5%) were on the topic of COVID-19. Among the COVID-19-related articles published, the top three article types were letters to the editor (29.3%), editorials (25.3%), and original articles (20.0%). The three most cited articles on COVID-19 in the JBP received 23, 18, and 15 citations, respectively. The IF of the JBP has shown progressive growth in recent years in the Clarivate Analytics Journal Citation Reports database, reaching 2.800 in 2022. Citations related to articles on COVID-19 were the most frequent, accounting for 19.5% of the total for the IF in question, compared with only 14.0% for those related to articles on tuberculosis.

Although strategies for the management of the JBP, including the modification of editorial processes, were adopted during the COVID-19 pandemic, scientific rigor in the evaluation of manuscripts was always maintained. We sought to reduce the time for the evaluation of manuscripts in order to speed their publication after approval, and the continuous publication modality adopted in recent years was fundamental for achieving that goal. The dissemination of COVID-19-related articles on various social networks and on the JBP website was expanded, and a specific area for manuscripts on the topic was created on the Journal website. The lead authors of featured articles on COVID-19 recorded podcasts and provided abstracts for the dissemination of those articles. The authors of some original articles were asked to resubmit them as letters to the editor, and the number of editorials on COVID-19, especially those related to “hot topics”, was expanded. The articles on COVID-19 submitted to the JBP varied in quality. Some were confirmatory studies that presented results similar to those published in other manuscripts, and some could not be interested in the Journal. The editorial board played a fundamental role in the initial evaluation of articles on COVID-19 submitted to the JBP, acting in a timely manner in view of the need for a rapid response. The difficulty in finding reviewers for some articles is also noteworthy, underscoring the importance of the strategy adopted by the JBP of expanding the pool of reviewers to include researchers who have some experience in the area. Practices adopted by the JBP to compensate reviewers for their work include extending invitations to write editorials and including their names in acknowledgments, as well as in the list of reviewers released annually and in the credits published on the Publons platform.

Finally, we must thank all of the authors, reviewers, editorial board members, and staff, as well as the board of directors of the Sociedade Brasileira de Pneumologia e Tisiologia, who were fundamental for the excellent progress and evolution of the management of the JBP, especially in view of all the challenges posed by the COVID-19 pandemic. We sought to maintain the JBP as a journal that prioritizes clinical aspects, together with aspects of the practice of pulmonologists and of health care professionals working in related areas, including COVID-19, as well as seeking to improve the quality of articles, thus contributing to scientific advances in the area and to greater internationalization of the Journal.

REFERENCES

1. World Health Organization (WHO) [homepage on the Internet]. Geneva: WHO; c2022 [updated 2020 Mar 13; cited 2022 Nov 1]. WHO Director-General’s opening remarks at the media briefing on COVID-19 - 11 March 2020. Available from: https://www.who.int/directeur-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

2. World Health Organization [homepage on the Internet]. Geneva: WHO; c2022 [updated 2022 Oct 28; cited 2022 Oct 28]. WHO Coronavirus (COVID-19) Dashboard. Available from: https://covid19.who.int/

3. Tanni SE, Fabro AT, de Albuquerque A, Ferreira EVM, Verrastro CGY, Sawamura MVY, et al. Pulmonary fibrosis secondary to COVID-19: a narrative review. Expert Rev Respir Med. 2021;15(6):791-803. https://doi.org/10.1080/17476348.2021.1961472

4. Raynaud M, Goutaudier V, Louis K, Al-Awadhi S, Duboug Q, Truchot A, et al. Impact of the COVID-19 pandemic on publication dynamics and non-COVID-19 research production. BMC Med Res Methodol. 2021;21(1):255. https://doi.org/10.1186/s12874-021-01404-9

5. Schonhaut L, Costa-Roldan I, Oppenheimer I, Pizzaro V, Hani D, Diaz F. Scientific publication speed and retractions of COVID-19 pandemic original articles. Rev Panam Salud Publica. 2022;46:e25. https://doi.org/10.26633/RPSP.2022.25

6. Khater A, Naughton M, Dambha-Miller H, Redmond P. Is rapid scientific publication also high quality? Bibliometric analysis of highly disseminated COVID-19 research papers. Learn Publ. 2021;34(4):568-677. https://doi.org/10.1002/leap.1403

7. National Library of Medicine. PubMed.gov [homepage on the Internet] Bethesda: National Library of Medicine; c2022 [cited 2022 Nov 1]. Search: COVID. Available from: https://pubmed.ncbi.nlm.nih.gov/?term=COVID+AND+Brazil&sort=date

8. National Library of Medicine. PubMed.gov [homepage on the Internet] Bethesda: National Library of Medicine; c2022 [cited 2022 Nov 1]. Search: COVID. Available from: https://pubmed.ncbi.nlm.nih.gov/?term=COVID+AND+Brazil&sort=date

9. Putman MS, Ruderman EM, Niforatos JD. Publication Rate and Journal Review Time of COVID-19-Related Research. Mayo Clin Proc. 2020;95(10):2290-2291. https://doi.org/10.1016/j.mayocp.2020.08.017

10. Clarivate. Journal Citation Reports [homepage on the Internet]. c2022 [cited 2021 Dec 1]. Browse journals. Available from: https://jcr.clarivate.com/jcr/browse-journals

11. Clarification of Mortality Rate and Data in Abstract, Results, and Table 2. JAMA. 2020;323(20):2096. https://doi.org/10.1001/jama.2020.7881

12. Mehran MR, Rutschitzka F, Patel AN. Retraction-Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis [retraction of: Lancet. 2020 May 22;1:1; Lancet. 2020;395(10240):1820]. https://doi.org/10.1016/S0140-6736(20)31324-6

13. Suart C, Neuman K, Truant R. The impact of the COVID-19 pandemic on perceived publication pressure among academic researchers in Canada. PLoS One. 2022;17(6):e0269743. https://doi.org/10.1371/journal.pone.0269743

14. Araujo-Filho JAB, Sawamura MVY, Costa AN, Cerri GG, Nomura CH. COVID-19 pneumonia: what is the role of imaging in diagnosis?: J Bras Pneumol. 2020;46(2):e02000114. https://doi.org/10.36416/1806-3756/e02000114

15. Baratella E, Crivelli P, Marrocchico C, Bozzato AM, Vito A, Madeddu G, et al. Severity of lung involvement on chest X-rays in SARS-cov-2 infected patients as a possible tool to predict clinical progression: an observational retrospective analysis of the relationship between radiological, clinical, and laboratory data. J Bras Pneumol. 2021;47(5):e02000228. https://doi.org/10.36416/1806-3756/e02000228

16. Chate RC, Fonseca EKUN, Passos RBD, Teles GBDS, Shoji H, Szarf G. Presentation of pulmonary infection on CT in COVID-19: initial experience in Brazil. J Bras Pneumol. 2020;46(2):e0200121. https://doi.org/10.36416/1806-3756/e02000121