

COVID-19 pandemic as reflected in *Advances in Clinical and Experimental Medicine*

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Abstract

The editorial demonstrates changes in the number and subject matter of papers dealing with issues related to the coronavirus disease 2019 (COVID-19), which were published in *Advances in Clinical and Experimental Medicine* (ACEM) during 3 years of the pandemic (2020–2022). In 2020, 24 such manuscripts were submitted to the editorial office, of which 9 were published; in 2021, 48 were submitted and 10 published, while in 2022, there were 34 articles submitted and 4 published. Authors of this editorial point out that while initially chances for publication of papers regarding COVID-19 were greater than papers covering other issues, the editors of ACEM gradually enforced the same requirements for COVID-19-related papers as for the others (the acceptance rate for these papers was 37.5% in 2020, 20.8% in 2021 and 11.8% in 2022). The published papers described, among other aspects, the relationship between COVID-19 and other diseases (e.g., pneumonia, Parkinson's disease and acute kidney injury) and methods of preventing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection among healthcare staff. An emergency situation of pandemic called for disseminating the results of scientific research as promptly as possible; however, the proper answer to this challenge is not lowering and simplifying requirements for peer review, but releasing the results in a form of registered preprints, which allow for provisionally making the paper available for the scientific community while the peer review verification is still ongoing.

Key words: COVID-19, pandemic, SARS-CoV-2, scientific journal, preprint

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Introduction

In November 2022, 3 years will pass since COVID-19 disease has first been described. Rapid spread of the pandemic and the observed mortality – high for a disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) – resulted in diverting the interest of many researchers to elucidating the etiology of this disease and establishing treatment methods. *Advances in Clinical and Experimental Medicine* (ACEM) is a scientific journal covering all clinical and experimental medicine as well as issues from other fields of knowledge related to medicine. Therefore, it was obvious that the emergence of a new disease – COVID-19 – and the subsequent spread of the pandemic in the whole world would be reflected in the thematic scope of submitted manuscripts and published papers. First articles pertaining this field started to reach the ACEM editorial office around March 11, 2020, when World Health Organization (WHO) declared the outbreak a pandemic.

Over the last 3 years, the number of publications relevant to this issue has increased massively. According to the Web of Science database searched with keywords „COVID-19” and „SARS-CoV-2”, in 2019, 48 articles (both original papers and reviews) were published, in 2020 – 80,312 (sic!), in 2021 – 150,590, and in 2022 – 119,053 (as for October 31, 2022). There are already 313 papers (as for October 31, 2022) dated 2023. Papers on COVID-19 were cited unusually often – some even 15,000 times (sic!).^{1–3} It is certainly safe to say that throughout the history of scientific medical journals no other subject became so popular in such a short time. Nevertheless, it has to be also strongly stressed that this phenomenon was neither a result of a trend similar in nature to fashion, nor an attempt made by many researchers to boost their career, but a proper response of the scientific community to a clear and present danger to the health and life of the entire world population. The research – undertaken first in China, where the virus was first isolated, and then in other countries – focused on the pathogen itself and its identified mutations, course of infection, possible complications and comorbidities, relationship between COVID-19 and other diseases, as well as – which can be particularly observed in papers published in ACEM – the impact of the pandemic on the possibilities of treating patients by doctors of various specialties, and issues related to preventing SARS-CoV-2 infection among healthcare staff (doctors, nurses, orderlies, other personnel).

Papers on COVID-19 published in ACEM

Advances in Clinical and Experimental Medicine, as a scientific journal, has had its share in disseminating relevant results of research on COVID-19/SARS-CoV-2. In 2020–2022 (as for October 31, 2022), a total of 106 papers

covering various aspects of COVID-19 outbreak were submitted to the journal, of which 23 were published. The average acceptance rate for those papers amounted to 21.7% and was higher than the average acceptance rate for all manuscripts submitted in this period (16.2%). In 2020, 24 such manuscripts were submitted to the editorial office, of which 9 were published; in 2021, 48 were submitted and 10 published, while in 2022 there were 34 articles submitted and 4 published. If the acceptance rate is taken into consideration separately for the respective years, it can be observed that the editors of ACEM gradually enforced the same requirements for COVID-19-related papers as for other papers (the acceptance rate for COVID-19-related papers was 37.5% in 2020, 20.8% in 2021 and 11.8% in 2022 (as for October 31, 2022)). Therefore, it can be noted that in the 1st year of the pandemic, the novelty effect had a clear influence, but in the following 2 years the acceptance rate has decreased to a value similar to the average for all papers published in ACEM.

The thematic scope of the published papers was broad – in line with the general profile of the journal – and concerned, e.g., the relationship between COVID-19 and other diseases (e.g., pneumonia,^{4,5} Parkinson's disease⁶ and acute kidney injury⁷), and methods of preventing SARS-CoV-2 infection among healthcare staff.^{8–11} The most cited COVID-19-related papers published in ACEM are studies by Wierzbicki et al. and Zubkiewicz-Kucharska et al.^{9,12}

Preprints – prompt dissemination of results

The presented data clearly show 2 patterns. On the one hand, many important studies exploring diverse aspects of COVID-19 pandemic were published in ACEM and showed a persistent interest from among scientific community. On the other hand, such strong presence of this subject matter in the journal did not mean lowering the standards of scientific and linguistic assessment and verification of the submitted manuscripts, which could have been justified by the state of necessity. It is worth noting that a modern model of disseminating scientific papers allows for sharing particularly significant research results before their publication in a peer-reviewed scientific journal. It is of paramount importance that other investigators – and in some instances also health and state authorities, or even the general public – have the access to such papers immediately. Registered preprints are a tool that provides such possibility. They are made available – usually as PDF files with a DOI – on the websites of various universities and other research institutions, as well as on dedicated portals (e.g., <https://www.researchsquare.com/>). Such preprints are accordingly marked to make the readers aware that they are reading a text that is still to undergo peer review or is in the process of review. Therefore, while the paper is being reviewed and edited


to be published in a journal, the scientific community can offer their remarks or become inspired by the shared results, hypotheses and ideas. Various aspects of this problem in the context of COVID-19 pandemic have already been discussed in medical literature in the last 3 years.^{13–20} The experiences of ACEM unambiguously exemplify that the outlined model of scientific communication (preprint followed by peer-reviewed publications), contrary to expecting the peer review process at the expense of its quality, is the right direction of developing scientific journals and a proper answer to challenges of the modern world as they are reflected in science and scientific publishing.

Where are we after 3 years?

The strategy of dealing with the influx of COVID-19-related manuscripts implemented by ACEM editorial office proved successful – we managed to publish several relevant papers without putting at stake the scientific integrity or editorial standard of our journal. The magnitude of this influx caused was certainly reflected in the journal – but was no excuse for inadequate result reporting, shortcomings regarding proper English or lack of originality. The rise of acceptance rate in the 1st pandemic year (2021) comes from a rapid shift in professional interests of our authors, as not only epidemiologists and virologists wrote about SARS-CoV-2. However, no temptation to lower the standards existed at any time because the authors also did not loosen their scientific rigor and many of them provided meticulously prepared manuscripts. The following remark could serve as a conclusion: In a sense, from the editors' point of view, COVID-19 pandemic was clearly an emergency situation, but not a state of necessity.

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