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Editorial

Editorial priorities and timeliness of editorial assessment and peer review during the COVID-19 pandemic

Patrick Sullivan*, Ed Trapido, John Acquavella, Richard F. Gillum, Russell S. Kirby, Michael R. Kramer, Suzan L Carmichael, Cara L. Frankenfeld, Edwina Yeung, Cory Woodyatt, Stefan Baral

Emory University Rollins School of Public Health, Atlanta, GA

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Academic journals have played a key role in the response to the global COVID-19 pandemic by quickly disseminating new knowledge about the virus, the epidemic and clinical care. However, many of the same people responsible for providing clinical care, leading public health responses and conducting research are also responsible for the operations and management of scientific journals. Given our dual or triple roles in clinical care, research and dissemination, at the outset of the pandemic, we were immediately concerned about how the timely operations of *Annals of Epidemiology* would be impacted, because our journal relies on volunteer service of peer reviewers and editors. In this editorial, we summarize the changes we made in operations to prioritize COVID-19 publications and the impacts of the pandemic on our editorial processes, submission volume, and journal operations during 2020.

Responding to COVID-19 has impacted the personal and professional lives of people globally, including researchers. Many epidemiologists in academia and public health have directly contributed to COVID-19 research or response activities. For academic researchers, time was also needed to adapt teaching to online formats, and additional administrative and committee obligations emerged in supporting educational programs during the pandemic.

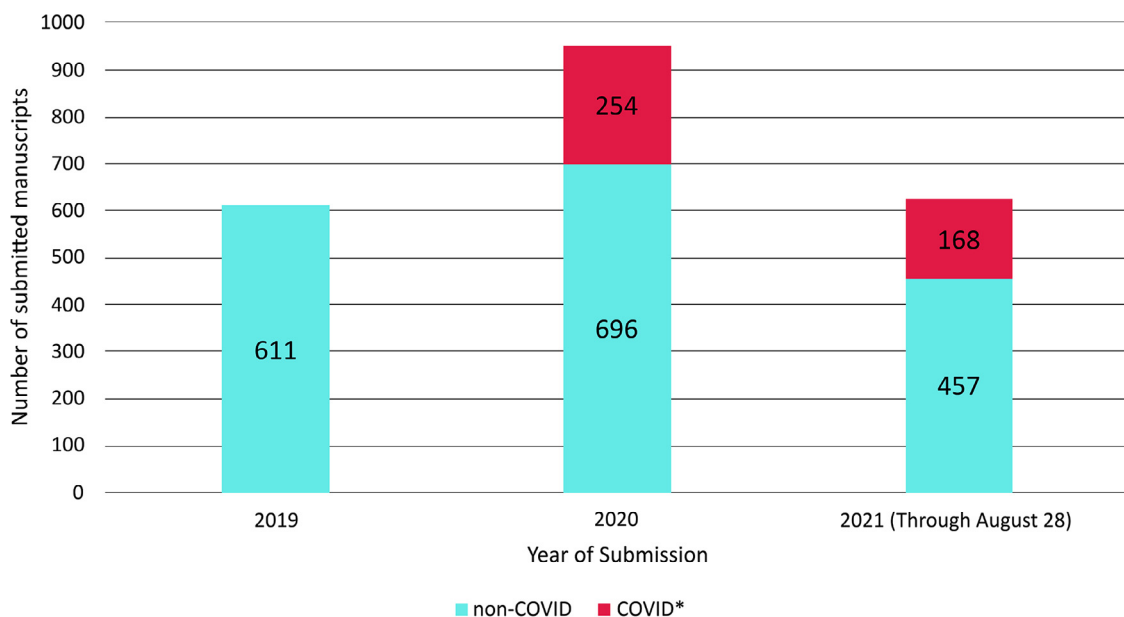
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* Corresponding author.

E-mail address: patrick.sullivan@emory.edu (P. Sullivan).

Separate from increased professional responsibilities, many researchers also assumed new childcare or eldercare responsibilities. Other academics have dedicated time to check in with and support mentees and colleagues who are navigating new challenges with career and family responsibilities. The effects of these new activities have pulled in both directions in terms of academic productivity: academic authors have had competing demands that might have decreased availability to serve as peer reviewers to journals, and new COVID-19 related manuscripts might have resulted in increased submissions.

Early in the pandemic, we took steps to prevent possible delays in review and publication and to monitor our performance. As we began to see COVID-19-related submissions in March and April 2020, *Annals* editors communicated through emails and video conferences to discuss the journal's priorities for handling COVID-19-related manuscripts. We believed that it was critical to rapidly triage COVID-19-related manuscripts as appropriate or inappropriate for *Annals*, and, if appropriate, to expedite peer review and quickly inform authors of the decisions. Therefore, we assigned three *Annals* editors to meet twice weekly to review all COVID-19 submissions. They reviewed using the journal's criteria for referral for external peer review. We prioritized for rapid external review manuscripts addressing 1) novel epidemiological or government data characterizing determinants of confirmed cases and exposures; 2) innovations and challenges with data and methods characterizing COVID-19 epidemic trajectories; and, 3) strategies, evaluation approaches, and results of interventions for COVID-19 management and prevention.



*COVID manuscripts are defined as manuscripts whose title contain the word "COVID" or "SARS-CoV-2"

Fig. 1. Manuscript submissions, by year and COVID-19 Manuscript Status *Annals of Epidemiology*, January 1 2019,-August 28 2021.

We received a high volume of manuscripts on COVID-19 with limited public health inferences. For example, we generally immediately rejected the following: 1) narrative summaries of COVID-19 case data broadly across the world or in specific countries or regions with limited inferences; 2) summaries or representations/visualizations of data from WHO statistics, CDC statistics, or other public data sources; 3) standardized projection estimates developed by projecting into the future recent trends in diagnoses or deaths which assumed constant diagnosis or death rates; and 4) reports of diagnoses or deaths from single medical institutions. Although these reports have local or clinical interest, we felt that they were less important for an audience of applied epidemiologists. We share these observations about what we systematically triaged because we or others might consider our observations in developing editorial guidelines for priorities in a future public health emergency and because it is important to consider the right types of venues for disseminating these kinds of reports in the ongoing COVID-19 pandemic and in future pandemics.

We tracked and summarized the COVID-19 and non-COVID-19 rejection and final acceptance rates using our manuscript submission and management system. We hypothesized that increased submission rates might reduce journal performance in terms of editorial processing times; to assess this, we compared time to final decision for non-COVID-19-related manuscripts submitted in 2020 with data from 2019 as pre-pandemic reference year.

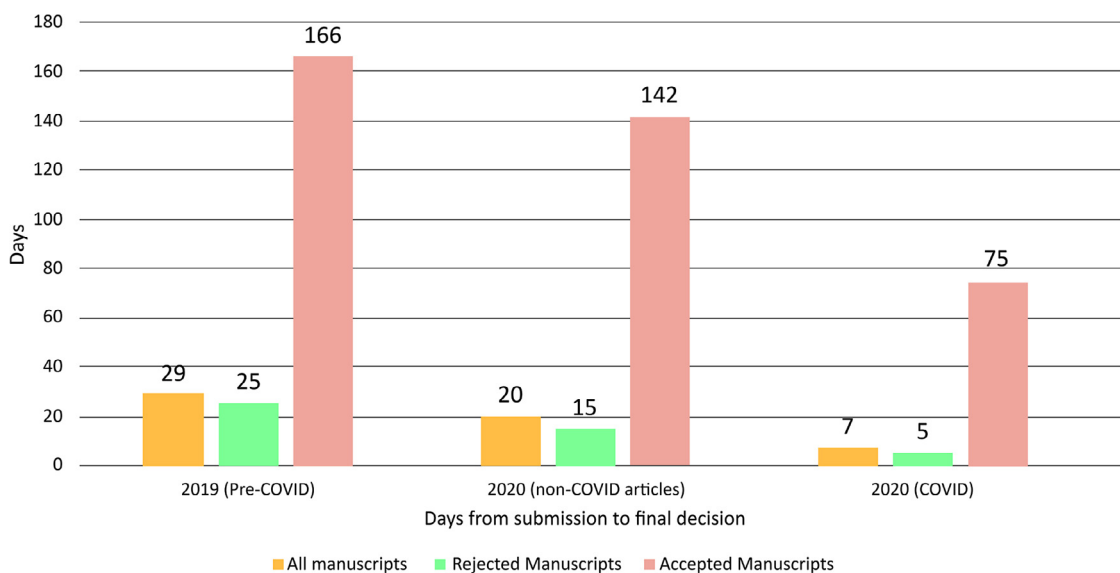
During 2020, 950 total submissions were received – the highest annual number of submissions for *Annals of Epidemiology* and a 52% increase over 2019 (Fig. 1). Of the 950 submissions in 2020, 254 (27%) were COVID-19-related. COVID-19-related submissions included 126 original articles (50%), 55 short communications (22%), 34 review articles (13%), 22 commentaries (9%), 10 letters to the editor (4%) and 7 other types (3%). Of the 254 COVID-19-related submissions, 222 (88%) were either rejected without external peer review or after external review and 27 (11%) were accepted for publication; five were withdrawn. The median time from submission to the final decision for COVID-19-related submissions in 2020 was 7 days; for COVID-19 manuscripts rejected, the median time to the final decision was 5 days and for articles ac-

cepted, the median was 75 days (Fig. 2). In 2020, a total of 149 articles were published, compared to 127 published articles in 2019.

We also had concerns that the focus on a prompt editorial process of COVID-19-related manuscripts might decrease our timeliness in processing non-COVID-19 manuscripts. To evaluate this, we compared the time to the first decision and the final decision for all articles submitted in 2019 to non-COVID-19 articles submitted in 2020 (Fig. 2). In 2019, the median time to the final decision for all 611 submitted articles was 29 days; for rejected manuscripts (including those rejected after peer review), the median time to the final decision was 25 days and for accepted manuscripts, the median was 166 days. For non-COVID-19 articles in 2020, the median time to the final decision for all articles was 20 days; for rejected manuscripts (including those rejected after peer review), the median time to the final decision was 15 days and for accepted manuscripts, the median was 142 days. Thus, the median time to the final decision for non-COVID manuscripts was shorter in 2020 than in 2019.

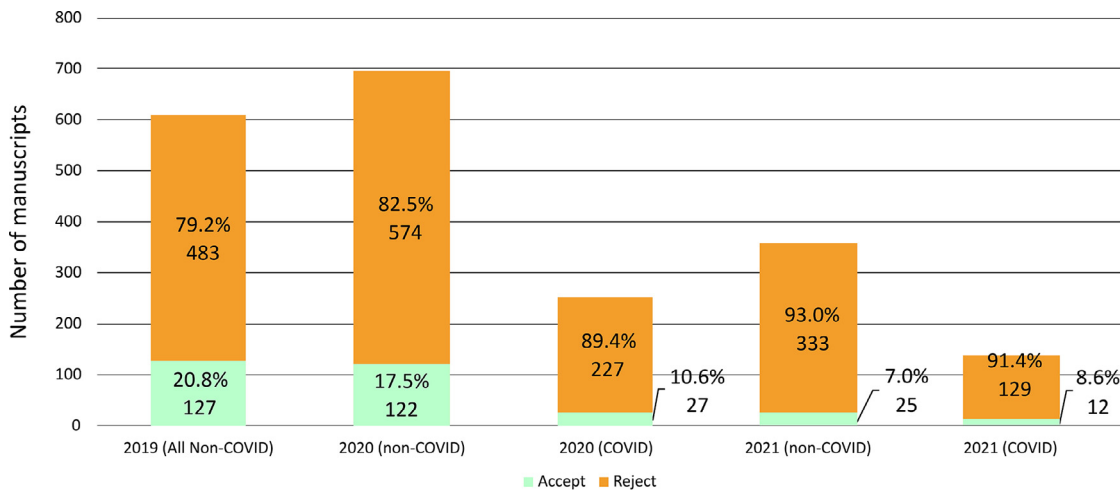
In 2020, the proportion of submitted manuscripts that were accepted was higher for non-COVID-19 manuscripts than for COVID-19-related manuscripts (Fig. 3). For manuscripts submitted in 2021, proportions of accepted manuscripts were similar for non-COVID-19 and COVID-19-related manuscripts, although the estimates through August 28 2021 are provisional and are likely biased because most rejected papers are desk rejected, and the time to desk rejection is much shorter than the time to eventual acceptance. Therefore, estimates of the accepted proportion of papers submitted in 2021 should be interpreted with caution until mid-2022.

COVID manuscripts published in the journal may have had an important impact on the utilization of manuscripts in *Annals of Epidemiology*. Five of the ten *Annals of Epidemiology* most cited manuscripts published in 2019–2020 and cited in the first 6 months of 2021 were manuscripts focusing on COVID-19, although only 10% of manuscripts published during the period focused on COVID-19. Among the citations of those ten most cited manuscripts, 80% of citations were to COVID-19-related manuscripts. These data suggest the critical role for the expedited



Articles rejected include those desk rejected and those rejected after peer review. COVID manuscripts are defined as manuscripts whose title contain the word "COVID" or "SARS-CoV-2"

Fig. 2. Median days to final decision for submitted articles, by COVID type and year of submission, Annals of Epidemiology, 2019–2020.



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Fig. 3. Final Manuscript Status, by year of submission and COVID-19 manuscript status among manuscripts with a final editorial disposition, Annals of Epidemiology, January 1 2019- August 28 2021.

editorial processing and publication of manuscripts during a time of emerging knowledge for a new public health threat. We also note that we increased the number of manuscripts published in 2020 compared to 2019. In an age of digital publishing, this requires additional editorial time, reviewer time, and production resources, but not additional printing expenses for paper versions of the journal; we believe that journal editors and publishers should anticipate the need to publish more manuscripts during a public health crisis. We would plan to publish an increased number of meritorious articles during future emergent public health crises and would plan to scale up editorial and reviewer capacity if possible.

Epidemiology serves a foundational role in our understanding and response to rapidly emerging public health threats such as COVID-19. One of the lessons learned in the COVID-19 pandemic is that we now live in a world where the scientific publishing process, which can be deliberative and sometimes frustratingly slow, is competing with other venues for disseminating public health information that are not subject to peer review and that

have been used to disseminate misinformation and disinformation. The changes in our editorial processes, priority setting for COVID-19-related manuscripts and evaluation of process outcomes presented here represent our responses as Editors to shorten the cycle for peer review while maintaining a rigorous peer-review process. The timely sharing of peer-reviewed data and manuscripts makes it more likely that lessons learned in one setting can be promptly scaled across many research and public health response settings. The Editors of *Annals of Epidemiology* commit to the ongoing expeditious evaluation of meritorious manuscripts related to the epidemiology and response to the ongoing SARS-CoV-2 pandemic and future emergent public health issues.

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