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BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Preprints. How are the major medical journals handling them?

[*JAMA Open Network*](#) released a study today examining current practices regarding preprint articles among the 100 most referenced medical journals in the world. Preprint servers are publicly available repositories where researchers upload preliminary versions of articles before they have undergone peer-review for possible acceptance by an academic journal for publication. Submission of a preprint has become a common practice in many disciplines including physics, mathematics and computer science research over the last decade. In these fields, preprint publication is thought to accelerate dissemination of new knowledge to a wider scientific community while simultaneously inviting a larger group of experts to comment on emerging work before it has become canonized into the academic literature.

Until recently, as a field, medical research had shunned the widespread use of preprint servers. But the uptick in biomedical research and its urgency during the covid-19 pandemic has led biomedical researchers to increasingly turn to preprint servers. One argument against the use of preprint servers is the sensitivity of protected health information (patient data). Another is concern that new findings could be misinterpreted, leading to the improper adoption of a new medical practices before they have been thoroughly vetted. But perhaps that largest barrier to preprint publication taking hold among biomedical researchers has been the concern that high impact journals would be less likely to accept articles that have already run their course in the public spotlight. From the perspective of such journals, it would also be problematic if the medical community conflated final publication with an earlier, unvetted, version of an article. Additionally, the public may have difficulty distinguishing between a preprint, a peer-reviewed article, and the significance of a preprint article that never reaches a peer-reviewed journal.

The goal of the *JAMA Network Open* study was to describe policies of the top 100 biomedical research journals with respect to accepting submissions of articles that have already appeared on a preprint server. Of the 100 journals, 86 did not consider the existence of a preprint version as a conflict, 13 would review each article to determine whether the submission to the journal would “add meaningful new information to the medical literature or will be redundant with information already disseminated with the posting of the preprint” and just one journal would not consider any article with a preprint. There was no association between a journal’s “impact factor” and its policy on preprints. The impact factor of a journal is, roughly, the average number of citations each paper published in that journal receives each year.

This study suggests that prominent biomedical journals have realized that a shift in the pattern of disseminating knowledge has taken place during the covid-19 pandemic. However, it is still important to consider that the nature of biomedical research might make it inherently less amenable to preprinting than has been the case for mathematicians, computer scientists, and physicists where the stakes around any potential misunderstanding of new research are lower.

–Michael Chary, MD, PhD

POLICY BRIEFING

The never-ending testing nightmare.

As the numbers of covid-19 cases continue to rise across the United States, [testing](#) continues to be an issue despite the rapid expansions that have occurred. In the upcoming weeks, demand is expected to continue to outpace capacity. In some areas, one-day results for covid-19 testing have been limited to hospitals, [while others](#) are experiencing 3-5 day delays before results come back—some areas even average 7 days. At the start of the pandemic in the US, testing kits were a rate-limiting step—now we lack the equipment needed to test samples. In response to this, the Food and Drug Administration [reissued](#) an emergency use authorization (EUA) for the Quest Diagnostics SARS-CoV-2 rRT-PCR test, which detects the virus's genetic material. This EUA also expands the use of pooled samples, enabling up to four samples to be tested at once. For example, if a family of four combines their tests into one vial, and the test is negative, the whole family is clear. While a positive pooled test doesn't identify who tested positive, it can be assumed that all have been infected until proven otherwise. Pooled sampling also cuts down on processing time since multiple tests can be run simultaneously rather than one after the other. However, this testing strategy is most feasible in areas with low prevalence of disease since a positive test usually requires the individually retesting each of the samples in the pooled batch. Nevertheless, pooled testing is a much-needed step in meeting the need for increased testing. So far, Quest is the first company obtain an EUA for pooled sample testing. *Various.*

—Onyeka Otugo, MD, MPH

Healthcare groups ask federal government to do more.

In a series of recent letters, health organizations have asked Congressional leaders to include additional targeted funds in future relief bills. The first, [directed](#) at leaders of both the US Senate and the House of Representatives, focuses on the need to bolster contact-tracing efforts. Citing the importance of such efforts in tracking the spread of SARS-CoV-2, the letter warns that the \$25 billion allocated in the CARES Act may not suffice. While local governments plan to increase contact tracers to 66,000, state funds are rapidly depleting. Estimates show that more 100,000 tracers are necessary to carry out effective tracing.

In a separate [letter](#), the American Hospital Association, American Medical Association and American Nursing Association requested that the next Senate relief package include provisions to strengthen the federal covid-19 response to marginalized communities, racial and ethnic minorities in particular. Data shows that these populations are disproportionately dying and account for a higher fraction of confirmed cases. To combat this, the groups request the collection and reporting of demographic and health inequity data, support for a workforce to aid and communicate with highly affected communities, improved testing access, health insurance coverage, more funding for research, and supporting social determinants of health. *Various*

—Joshua Lesko, MD

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Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health policy, and public policy.