



Stuck in the Past: Are We Really Translating Current Evidence?

Deep Shah

Senior Resident Doctor, Department of Community Medicine, GMERS Medical College, Valsad, India

Correspondence: Dr Deep Shah, Email: deeppankajshah@gmail.com

Abstract

Despite living in an age of instant digital access, scientific research still faces major delays in reaching the public, professionals and policymakers. The bottlenecks aren't limited to conducting studies, but they're embedded across the publication process. Researchers often face months of delays formatting manuscripts, waiting through desk rejections and enduring long peer-review cycles. Reviewer fatigue, journal backlogs and outdated workflows slow things further. For early career researchers, these delays can seriously impact career progress, funding chances and visibility. Important decisions like health policies, clinical guidelines or future research plans might be based on evidence that no longer reflects the latest knowledge. Even systematic reviews and emergency-response studies have suffered from late publication, missing the moment when their findings mattered most. Yet, the rapid publication seen during COVID-19 proves that speed is possible when prioritized. To address these challenges, several promising solutions are emerging: advance online publication, continuous publishing models, preprint sharing and systems for peer review reuse and manuscript transfers. These approaches can help reduce delays without compromising scientific rigor. The future of research publishing must focus not just on quality, but also on timeliness, because knowledge delayed is often opportunity lost.

Key Words: Early career researchers, Knowledge translation, Publication delays, Research timeliness, Scientific publishing

The Hidden Bottlenecks in Scientific Publishing

In an era of near-instant digital information, the journey of scientific research from discovery to actionable practice is still frustratingly slow. Delay doesn't only lie in conducting studies, but also common throughout the publication system: before submission, during peer review and after acceptance.

Researchers often spend months preparing manuscripts, selecting journals, formatting to specific guidelines and awaiting editorial check. Once submitted, many manuscripts are desk-rejected after long waits, forcing authors to resubmit elsewhere and repeating the process. The surge in submissions driven by "publish or perish" culture has overwhelmed editors and reviewers.^[1] A recent study observed that the total number of articles in major indexes (Scopus and Web of Science) has grown far faster than the growth in the population of researchers, meaning each reviewer is being asked to evaluate far more work than before.^[2]

Even when peer review begins, delays mount. In many journals, editors must invite multiple reviewers before securing enough who accept. For example, one study in Pharmacy Practice reported that nearly five invitations are needed for each reviewer who agrees to assess a paper and from first invitation to receipt of all

reports can take about 61 days.^[3] Reviewer fatigue, especially in specialized or niche subjects, compounds that problem.^[1]

This is not limited to a few journals. A systematic review of biomedical journals found that submission-to-publication times range from 91 to 639 days, with median values reaching nearly a year and a half in some fields.^[4] Even in general medical journals, the median time from submission to acceptance is 123 days, with another 68 days to publication.^[5] Speciality journals such as ophthalmology report similar patterns, with a median of 118 days to acceptance and 161 days overall.^[6] In Korea, an analysis of medical journals found the post-acceptance lag alone was over 120 days, after a 100+ day peer-review process.^[7]

Publication speed also varies greatly by region and discipline. An analysis of Indian journals by CSIR-NISCAIR found delays ranging from 5.2 to 22.4 months, with technical and editorial delays contributing heavily.^[8] Journals in information science show wide disparities, depending on review workflow, open access policies and journal infrastructure. Publication delays disproportionately disadvantage early career researchers by limiting their ability to demonstrate productivity, compete for funding and jobs and build academic visibility at a critical stage in their careers.

These delays amplify existing structural inequalities in scholarly publishing, where access to networks, institutional prestige and visibility can accelerate the path to publication; advantages that early career researchers often lack.^[9]

Systematic reviews, which are foundational for clinical guidelines and policy, are not immune. In a descriptive analysis of 300 systematic reviews, the median lag from the last search date to publication was found as 8 months. Additionally, about one in ten had delays of over 18 months.^[10] This leaves a possibility that new studies that emerge after submission of systematic reviews may alter the clinical conclusions, rendering the review partially outdated at the time of publication.

Even in emergencies, where speed is paramount, delays can persist. A cross-sectional study of trial reporting during H1N1, Ebola and Zika epidemics found that many trials, while operationally complete, had results reporting and publication delayed, reducing their effectiveness for informing response.^[11] However, the COVID-19 pandemic showed that journals can move faster when they choose to. A study of over 800 COVID-related manuscripts reported median time to acceptance was just 3 days and publication occurred within 9 days.^[12] This proves that the problem is not one of impossibility, but it is of inertia.

The consequences of delay are serious. Research may be out of sync with current clinical or policy needs. Systematic reviews may guide decisions based on incomplete or now outdated data. Early career researchers are harmed when hiring, grants, or promotions depend on published output that is delayed. Delays also erode public trust when urgent health or policy issues demand prompt evidence.

So what can be done?

We must build a publication ecosystem that prioritizes speed, transparency and relevance without compromising scientific rigor. Journals across disciplines have adopted a range of innovations aimed at reducing these delays while maintaining the integrity of the publication process. Some of the most impactful and commonly used strategies include:

1. Advance Online Publication (Early View / Article in Press)

Many journals now publish accepted manuscripts online before they are formally assigned to a volume or issue. These versions are peer-reviewed and copyedited, fully citable and made available within days or weeks of acceptance. This ensures that research findings reach the community swiftly, even as the article awaits final pagination or issue assembly.

2. Continuous Publishing Models

Rather than releasing articles in batches tied to monthly or quarterly issues, continuous publishing allows each article to be published as soon as it's ready. This rolling publication model eliminates unnecessary waiting times and aligns with the digital nature of modern scholarly communication, where immediate access is increasingly valued.

3. Preprint Integration and Early Sharing

Journals increasingly support or even encourage authors to share preprints of their manuscripts (early versions not yet peer reviewed) on public servers. In some cases, journals integrate preprint deposition into the submission process itself. This approach allows research to be publicly available early in the review process, fostering immediate visibility and feedback from the wider community.

4. Streamlined Peer Review and Reviewer Portability

Peer review remains a major source of delay in the publication pipeline, particularly when manuscripts are repeatedly reviewed at multiple journals after rejection. To address this, several journals and publishers are implementing mechanisms to reuse or transfer peer reviews between journals, either within a publishing group or through broader reviewer portability initiatives. This means that if a manuscript is rejected by one journal but includes useful peer review reports, those reviews can be forwarded to another journal. The receiving journal can then make a faster decision based on the existing evaluations, rather than restarting the peer review process from scratch. Some publishers even coordinate review-sharing across their portfolios to support this.

5. Manuscript transfer systems

Services like manuscript transfer systems, currently offered by certain publishers (like Springer Nature, Elsevier and Wiley), allow authors to submit their manuscript and reviews to a related journal with minimal effort, often with the same editorial platform and reviewer pool. This reduces redundancy, saves time for both authors and reviewers and avoids unnecessary delays caused by starting over.

In conclusion, in an era where research is advancing at an unprecedented pace, the real cost of publication delays lies in the widening gap between discovery and its application. The need of the hour is not just faster publishing, but timely publishing where current evidence can inform current decisions. Whether in policy, practice, or further research, relying on outdated literature undermines the relevance and impact of research. To bridge this gap, the publishing ecosystem

must prioritize models that support rapid, rigorous dissemination, ensuring that evidence is translated when it matters most. Only then can scholarly communication truly serve its purpose in a fast-moving world.

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