Reviewing the review process: Identifying sources of delay

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RESEARCH

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Abstract

Background

The process of manuscript review is a central part of scientific publishing, but has increasingly become the subject of criticism, particularly for being difficult to manage, slow, and time consuming – all of which contribute to delaying publication.

Aims

To identify potential sources of delays during manuscript review by examining the review process, and to identify and propose constructive strategies to reduce time spent on the review process without sacrificing journal quality.

Method

Sixty-seven manuscripts published in the Australasian Medical Journal (AMJ) were evaluated in terms of duration of peer review, number of times manuscripts were returned to authors, time authors spent on revision per review round, manuscripts containing grammatical errors reviewers deemed as major, papers where instructions to authors were not adhered to, and the number of reviews not submitted on time.

Results

The median duration of the review process was found to be 74 days, and papers were on average returned to authors

1.73 times for revision. In 35.8% of papers, instructions to authors were not adhered to, whilst 29.8% of papers contained major grammatical errors. In 70.1% of papers reviewers did not submit their reviews on time, whilst the

median time spent on revision by authors per review round was found to be 22 days.

Conclusion

This study highlights the importance of communication before and during review. Reviewers should be thoroughly briefed on their role and what is expected of them, whilst the review process as well as the author's role in preventing delays should be explained to contributors upon submission.

Key Words

Peer review, article submission process, research evaluation

What this study adds:

1. Time spent on manuscript review at an online medical journal is a major factor contributing to publication delay.

2. Potential sources of delay during manuscript review are identified, and strategies to reduce the duration of review are discussed.

3. This study highlights the importance of communication between editorial staff, reviewers and authors both before and during review.

Background

Online submission of article manuscripts for publication in scientific journals has become the norm rather than the exception. However, along with submissions reaching the publication faster, has come the expectation that the editorial process from submission to decision should take little time as well.¹ It is not uncommon for authors submitting manuscripts to online journals to expect a decision soon after submission, and when review takes longer than two weeks, tensions often rise.¹

The process of manuscript review, "a system whereby a paper is scrutinised by people who were not involved in its creation, but are considered knowledgeable about the subject",² is a central part of scientific publishing. However, it has become the subject of criticism,³ particularly for being difficult to manage, slow, and time consuming ⁴⁻⁷ – all of which contribute to delaying publication. For journal editors, in an era where the volume and speed of scientific publishing has increased exponentially, managing the review process has become a balancing act between



addressing the need of contributing scientists to get published timeously, and ensuring a journal of high standard.^{4,8} Amongst journal editors there are growing concerns that the quality - and duration - of the review process is being negatively affected as "referees are stretched thin by other professional commitments".⁹ This often leads to "challenges in finding sufficient numbers of reviewers in a timely manner".9 Editors furthermore frequently encounter poor agreement between reviewers about the acceptability of manuscripts, thereby extending the review process even more.¹⁰ In turn, reviewers find the preparation of a thorough and objective review to be timeconsuming.⁵ Authors, at the other end of the spectrum, often regard the review process as being unnecessarily extended due to reviewers focussing on trivia, pressing authors to confirm to their subjective views thereby supressing original thought, coercing authors into unnecessary revisions, and often "finding flaws where there are none".11-13

A recent publication by Shankar¹⁴ inquired how review and publication could be sped up while at the same time ensuring good quality. This study aims to address this question by examining the review process to identify potential sources of delays and proposing constructive strategies to reduce time spent on the review process without sacrificing journal quality.

Method

For the purpose of this study, 67 manuscripts published in the AMJ between January 2011 and August 2011 were evaluated in terms of: (a) average duration of peer review; (b) number of times manuscripts were returned to authors for revision prior to acceptance; (c) average time authors spent on revision per review round; (d) manuscripts containing grammatical errors reviewers deemed as major (as per comments from reviewers); (e) papers where instructions to authors or prescribed formatting were not adhered to (as per comments from reviewers); and (f) the number of reviews not submitted on time during the review process. Results were obtained by reviewing the journal's online journal management system and comments from reviewers after each review round.

Results

The median duration of the review process was found to be 74 days (Figure 1), and papers were on average returned to authors 1.73 times for revision.



Figure 1: Comparative duration of review. The outlying values are respectively the result of 131 days spent on three rounds of revision (A, 215 days), the manuscript having to be returned to author seven times for revision (B, 216 days), and 110 days spent on three rounds of revision (C, 257 days). The dotted line indicates the median duration of review.

In 35.8% of papers, instructions to authors were not adhered to, whilst 29.8% of papers contained major grammatical errors. In 70.1% of papers reviewers did not submit their reviews on time, whilst the median time spent on revision by authors per review round was found to be 22 days.

Discussion

From these results it is evident that the lack of timely review is a major reason for delay in the review process. In order to address this, it is crucial for reviewers to understand their role within the journal.¹⁵ Reviewers are essentially acting as "consultants to the associate editor, selected for their expertise".¹⁵ After considering the advice of the nominated reviewers, the associate editor in conjunction with a team of senior editors then decides whether a manuscript should be accepted, returned to the authors for revision, or rejected.¹⁵ When a reviewer fails to complete a review on time, after previously agreeing to review the article, the decision on whether that manuscript should be published is delayed. It is not fair to the authors of a manuscript when reviews are unreasonably delayed by sluggish reviewers.¹⁶ Reviewers are urged not to underestimate the importance of their input, and are reminded to agree to review a manuscript only if they can do so in a timely manner and only if it falls within their area of expertise.¹⁵ The AMJ, like most other journals, sets guidelines for what is an acceptable time for reviewing a manuscript. At the AMJ reviewers are expected to complete their reviews within two weeks. In a similar fashion authors are urged to be prompt when revising papers in response to review. In the case of the AMJ it was found that in 57% of papers, authors

took longer to revise manuscripts than the review round suggesting those very changes. Punctuality on the part of both reviewer and author is therefore critical in speeding up the review process.

The submission of badly formatted or low quality manuscripts was found to be another major reason for extended review periods.^{4, 14, 17} Authors should keep in mind that poor writing style often presents difficulty in following the logical flow of a manuscript and can have a "strong influence on the overall impression of their manuscript by both reviewers and editors".¹⁸ In terms of presentation, writing should be clear and concise, ideas should be clearly articulated and unambiguous, the title should be specific and reflect the content of the manuscript, and the abstract should be brief and indicate the purpose of the work (what was done, what was found, and its significance).^{16, 19} To boost paper quality, authors should be aware of instructions to authors and reporting guidelines – both technical and ethical – at the very start of their study.

More challenging still has been our observation that many submitted manuscripts are written using a level of English that makes them unsuitable for publication.¹⁹ The sheer percentage of manuscripts containing major grammatical errors may, for the sake of rapid publication, warrant a mandatory requirement that non-English speaking authors should seek the support of an English language expert prior to submission.

Conclusion

When considering that both reviewers and contributors involved with open access online journals such as the AMJ are often early career researchers or come from a non-English speaking background, detailed communication between editorial staff, reviewers and authors is critical. Reviewers should be thoroughly briefed on their role and what is expected of them, whilst the review process – and the author's role in preventing delays – should be explained to contributors upon submission. Finally, and most importantly, reviewers should be urged to provide sufficient direction to authors when requesting revisions to ensure that a final decision can be made on most manuscripts following a single round of review – a step which has the potential to considerably shorten the review process.²⁰

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PEER REVIEW

Not commissioned. Externally peer reviewed

CONFLICTS OF INTEREST

The author is the Associate Editor of the AMJ. This article was independently reviewed prior to acceptance and publication.

ETHICS COMMITTEE APPROVAL

This study did not require ethical approval.