

Role of Peer Review in Surgical Research

Vincent Kipkorir¹ , Aruyaru Stanley Mwenda² , James Kigera¹ 

¹Faculty of Health Science, University of Nairobi

²Department of Surgery, St Theresa Mission Hospital, Kenya

Correspondence to: Vincent Kipkorir; email: vincent.kipkorir@annalsof Africansurgery.com

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Introduction

Peer review can be defined as the process of subjecting scientific research output through the scrutiny of experts in the respective field for constructive criticism with an aim towards improving the quality of published works (1). It broadly serves to gate-keep against publication of poor-quality articles and in so doing ensuring accuracy through the assessment of validity, originality and relevance of submissions by researchers in peer reviewed journals. For those manuscripts that successfully pass through the aforementioned process, it would have served to improve their quality, ensure ethical conformation and address any aberrations noted (1). Rooted from the evaluation of ancient Greek writing 300 years ago and thereafter introduced into medical practice, as a way of ensuring physicians in their diagnostic and management algorithms met the quality of standards of care, peer review continually remains as a very critical component in evidence-based medicine(2) The peer review process commences the moment an author conducts research and submits a manuscript detailing the same to a peer-reviewed journal relevant to the theme of interest(3). It then proceeds as journal editors perform initial evaluation of the manuscript to see if it fits the scope of the journal and is in line with their prescribed instructions for authors. The journal

then initiates correspondence with reviewers who are experts in the subject of the manuscript to review and provide constructive input to the respective authors. Reviewers scrutinize the validity of the science and the appropriateness of the manuscript, thereby establishing its relevance in contributing towards advancement of the respective field while noting any inaccuracies. The recommendations fronted by reviewers are shared by the journal to the authors who then prepare a revised version based on corrections given. The responsibility of peer review in maintaining the soundness, authenticity and integrity of published research hence cuts across from authors to reviewers and the journals who serve as intermediaries (2,3).

The reviewer's responsibility to peer review starts way early from equipping oneself with appropriate skills and training to enhance their competence, as they hold such a critical role in determining the trajectory of a submitted manuscript(4). Fortunately, in this online era, several platforms such as Web of Science and peer review academies offer free or subsidized certified courses. Besides, more reviewers are needed with the ever-growing number of submissions, in order to address the looming peer review crisis heralded by the mismatch between submissions and available reviewers(4).

Reviewers should therefore endeavor to accept review requests from journals and submit their reviews in a timely fashion. Pertinent aspects assessed by reviewers include appropriateness of the study design, statistical measures employed, ethical considerations among others. For designs such as case reports, that may stretch to the novelty or diagnostic challenge faced by the authors. Such is the situation in this issue where Oluoch et al (5) describe a 13 year old boy treated for benign prostatic enlargement. In a similar way, Wanjara et al share the case of spontaneous bilateral colcutaneous fistulae (6). Reviewers' feedback to authors should be relayed in a timely, professional and constructive manner and not in any way condescending to the submitting authors. Chung et al. provides further details on the role of reviewers in peer review and their expected codes of conduct (7).

A journal's quality depends not only on the quality of articles submitted but even more importantly on the quality of its peer review systems(2). With the increasing number of articles submitted, most journals tend to compromise on this very important aspect, compounded by the existence of predatory journals whose focus is largely centered on financial self-interest (8). Journals, as the arbiters between authors and reviewers, have a mandate to ensure their reviewers are competent both in conducting peer review and in the thematic areas of the papers they are tasked to review. Editorial systems should therefore be furnished with links for reviewer training, clear guidelines for reviewers as well as a peer review template onto which reviewers should relay their feedback through. When conveying reviewers' comments and final decisions, editors have a role in compiling together comments from all reviewers to avoid contradictory feedback and reword statements in the event some comments remain potentially unpalatable to the authors. It is therefore the responsibility of journals to preserve the integrity of the peer review process while ensure its continued existence by equipping both reviewers and authors with the skills to ensure an efficient process. Journal editors are also tasked with ensuring growth and development of both parties and protecting researchers especially those in

early stages of their careers from bias or nonconstructive feedback.

As peer review aims at enhancing the quality of work published, authors are expected to conduct good research, comply with established standards and code of ethics as well as align their work in line with reviewers' comments. It is important for authors, in response to peer review feedback, to have the willingness to accept constructive criticism, be able to clearly relay feedback and exhibit perseverance through the entire process. Williams et al. outlines the 3 golden rules to observe when addressing corrections which include; answering completely, politely and with evidence (9). Provenzale et al. further go into detail and provide ten principles to observe when revising a manuscript, part of which entails a point by point response to issues raised while outlining the sections where the changes have been made (10). Handling rejection decisions from journals can be frustrating for authors, however, it is important that with an enduring spirit, they should improve the manuscript based on reviewers' or editors' comments and submit the revised version to a journal of a similar scope.

Peer review holds a pivotal role in the advancement of science, in nurturing surgical research and furthering the progression of evidence-based medicine. To ensure its continued success, all stakeholders and role players in the peer review systems need to pull their weight both from an understanding of its essence and an efficiency to play their respective roles in the process.

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