

Editorial

The next generation of peer review

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Abstract. Peer review is an important process that produces the evidence-based medicine that guides the standards by which we provide care. We all have a role to contribute to the advancement of our field through involvement in this process. Opportunities and guidance to the next generation of reviewers is essential to continue to move our field forward and is supported by the JPRM Residents and Fellows Program.

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As clinicians, we rely on the medical evidence that comes from peer-reviewed literature and often aspire to publish an article to contribute to the growing wealth of knowledge. However, few consider contributing through involvement in the peer-review process, even though clinicians, clinician educators and researchers all have a role to play in this scholarly activity.

We all wear many “hats“ and continue to cultivate new skills in addition to the traditional physician duties. It is reasonable to ask then: Is peer review for publication of manuscripts in the *Journal of Pediatric Rehabilitation Medicine* just another task to juggle along with duties outside of my career? Will this task keep me from my family? My vacation? Or maybe you’re wondering: Is the process just for academics? Perhaps you believe active peer review is just another burnout track. I challenge you to also wonder if it is possible that this academic activity could be a fulfilling conduit to renewed interest in our career field. To further illustrate this inquiry, let’s pause and reflect on why we value peer review.

Peer review has been utilized in medicine since the first millennium; it was first formally detailed in 1665 in the English journal *Philosophical Transactions of the Royal Society*. The aim of peer review has

evolved since that time from selection of papers for publication to ensuring the accuracy and relevance of a paper. Currently, it is a systematic and standardized review carried out by physicians, researchers and other clinicians that are experts in the area under investigation. Peer review is performed independent of the contributing authors to select and publish the best unbiased science, clinical reports and reviews.

Understanding the process is key. After an author submits a manuscript, it undergoes a preliminary assessment by the senior editor to determine if the content aligns with the aim and audience of the journal and if it is suitable to go to review. Once this is determined, it enters the peer-review process. Select peer reviewers then appraise the manuscript for its originality, soundness and appropriateness of the experimental design, and significance to the field. These comments are then reviewed by both the journal editor and authors, who are typically asked to revise their work for further consideration.

This is where peer reviewers come in. A peer reviewer is an individual with knowledge and interest in critical review of relevant research, whether an experienced, early or novice reviewer. The process is driven by guidelines specific to each journal. Additionally, there are various avenues to be trained in critical review, including the *Annals of Internal Medicine Journal Club* and online courses offered by publishers and other organizations like Publons.

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It is a skill that is developed with practice and one that is essential to moving forward the content of evidence-based medicine which is so critical to our field.

The peer review process is not without its faults, and at times involves biases and may fail. However, there are emerging efforts to improve the system and preserve the sanctity of our evidence based practice of medicine. One such method is a group peer-review in which multiple reviewers collaborate to assess a manuscript. This has been shown to result in more robust feedback. It also allows the opportunity for those involved the benefit of learning and participating in reviews, obtaining better insight into the publication process, improving writing and editing skills, and becoming content experts staying on the leading edge of current research.

It is with this in mind that the JPRM Residents and Fellows Program is excited to promote its mentoring program aimed to develop the next generation of pediatric rehabilitation medicine reviewers. This skill lends itself to be able to critically evaluate medical literature. We are recruiting a group of eager mentors and mentees who want to harness their skills and energy to move forward the contents of evidence-based medicine. Whether you consider yourself a skilled reviewer, an early reviewer, or a novice, this opportunity is for you! Peer reviewers are recognized by name in the last JPRM issue of the year. In addition to this, it is a recognizable mechanism of academic productivity.

If you are interested in joining in or learning more, please reach out to Sara Tinsley, JPRM Managing Editor, at jprmst@gmail.com.