

Peer Review: What Is It and Where Did It Come from? How Does It Relate to Publication in the *JOPR*?

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What is peer review?

Most scholarly journals in the sciences, including the health sciences, utilize a peer review system as part of their procedure for evaluating manuscripts for possible publication. The dictionary definition of the word “peer” is an individual who is of the same rank as another individual, an equal. Practically speaking, peer review means the review of a manuscript by someone who has expertise in the subject of the report.

A little history: the origin of peer review

The origin of this system of evaluating journal submissions is a bit murky but in the United States it probably dates from the mid-twentieth century, the immediate post-World War II period, when the US government initiated the National Institutes of Health grant system, awarding significant funding to individual researchers at universities to support research in the health sciences. A *grant* reviewing system grew up, drawing on the judgment of individuals with established expertise in a particular field, to determine which proposals merited funding. To promote objectivity, grant reviewers are “blinded,” they do not know the identities of the individuals whose proposals they are evaluating. This system of review, at that time already in use by a few health sciences journals for evaluating submitted manuscripts, quickly spread and soon most reputable journals had also adopted it.¹

How does peer review work at the *JOPR*?

The *Journal of Prosthodontics (JOPR)*, which began publication in 1992, has a blinded peer review system. When a manuscript is received at the *JOPR*, the Managing Editor first checks to be sure that all required manuscript elements are included and that the manuscript is correctly formatted. Readers familiar with these requirements will remember that they include the instruction that authors’ names appear only on a separate title page and *not* in any part of the pages containing the body of the manuscript. This rule allows the report to be evaluated by reviewers who do not know the identity or

affiliations of the authors. The Editor in Chief makes a quick evaluation of the work and if it seems potentially publication worthy, sends the manuscript, in pdf format² and without the title page, to the appropriate Section Editor. The Section Editor assigns the manuscript to two reviewers, normally individuals from the membership of the Editorial Review Board (see masthead page of the print *JOPR* and the journal’s website: www.dentistry.blackwellmunksgaard.com/jopr. *These will be individuals with expertise in the topic of the manuscript. In some instances, it may be necessary to identify outside individuals to conduct the review. A third reviewer may be added if the first two have sharply divergent views or if a statistical consultant is needed.*

The reviewers typically will make one of three recommendations to the Editor-in-Chief: accept the manuscript for publication, reject it, or send it back to the author with specific suggestions for revisions that the reviewers believe will make the manuscript acceptable for publication.

Responding to the review

Authors should not be discouraged if a manuscript is rejected or if revisions are suggested. Remember that the work of some notable researchers has met obstacles along the way to publication.³ Consider the reviewer’s comments carefully; take some time to think about how your report can be reshaped to respond to those comments. You may wish to revise and resubmit to the *JOPR* or submit to another journal.

References

1. For a history of peer review of the United States, see John C. Burham, The evolution of editorial peer review, *JAMA* 263(10):1323-1329, 9 May 1990. The entire 9 May 1990 issue of *JAMA* is devoted to articles presented at the First International Congress on Peer Review in Biomedical Publication, held in Chicago, IL, May 10-12, 1989. For a more general discussion of the concept of peer review, see Peer Review in the online encyclopedia, *Wikipedia*, at wikipedia.org (accessed 1/12/08)
2. pdf format can be sent as an e-mail attachment but, unlike word processing documents (e.g., .doc), cannot be altered
3. For an interesting discussion of this issue, see Coping with peer rejection, *Nature* 425(6959):645, 16 October 2003

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