Open Peer Review

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Peer review has supporters and doubters. Passing peer review does not guarantee honest, evidence-based science reporting. But it continues to be held as a standard for quality and an aid for advancing science knowledge. Recently, it has a new dimension through the Internet: open peer review (OPR). Traditional print journals and hybrid publications are exploring and some are using OPR, and open-access (OA) journals are generally keen on the process.

Trish Groves, deputy editor of BMJ and editor-in-chief of BMJ Open, stated in the first presentation that “peer review is not great, but it is the best thing we’ve got for now,” even with biases regarding authors, institutions, sex, geography, and English language; such manuscript issues as reporting positive results; and peer-review system challenges, including competing personal interests.

A BMJ randomized controlled trial of having peers sign critiques made no difference in review quality, Groves reported, “but absolutely increased the helpfulness” of the reviews. Skeptics of OPR have said, in light of the public discourse, that reviewers “will run for the hills. But that is not what we found”. Although BMJ has not gone fully to OPR, it will soon, she predicted. It has started publishing prepublication histories for some articles, including all signed peer-review reports, and uses a repository for full data and industry reports.

Since 1998, BMJ has offered postpublication peer review. Most of this consists of good, serious reviews, and bmj.com has about 95,000 rapid responses (openly accessible e-letters) in its postpublication series. “We have been bowled over by this,” said Groves. Postpublication comments are permanently attached to articles in the archives and often lead to further studies, she said. Ten years after going into print, an article can still have general reviews added in this way.

In OPR, reviewers are aware that their names and critiques will be known to authors and will be published online and, for some journals, accompany the printed article. All three panelists in this session mentioned that such global availability of OPR and author responses has promoted reviewer comments that are more civil and “nicer”, more helpful, and substantiated—or less antagonistic. In addition, OA allows the review to continue after publication.

According to how the definition of OPR is used by BioMed Central Ltd, an OA publisher, just over 20% of its journals have OPR, said Todd Hummel, editorial director for clinical medicine at BioMed Central, part of Springer Science+Business Media. Since 2000, BioMed Central has published journals with OPR, and about 35,000 papers have been published under OPR, Hummel said.

Overall, the presenters made the following points, outlined in particular by Adam Etkin, founder and managing director of PRE (Peer Review Evaluation), provider of PRE-val and PRE-score. Etkin said, smiling, that although articles about OPR have alluded to the Wild West of academic publishing, “I don’t think we’re quite ready to kill each other—yet.”

- **Pros**
  - Increased openness to provide assurance that investigators did what they said; to share more, but not all, information about process and to provide reviews seen by all and with potential participation by all.
  - Incitement of valid and different approaches to peer review.
  - Increased trust, transparency, and accountability, with reviewers thinking more carefully about the research and with more attention to detailed comments.
  - Constructive reviewer criticism.
  - Exposure of possible conflicts of interest more easily and quickly.
  - Speedier publication of research.
  - Reviewer acknowledgment and credit for contributions.

- **Cons**
  - Well-known authors possibly receive preferential treatment.
  - Need to consider potential legal and copyright issues.
  - Newer, younger scientists may have difficulty in being candid reviewers, knowing that authors could influence their academic future.
  - Potential delay in securing reviewers because of their unease in having their names published.

Etkin continued, “I don’t think many reviewers are eager to participate in open review” PRE helps journals to have more transparent peer review if they do not otherwise have the resources. It supports sharing of additional information about the peer-review process while respecting the need for anonymity.