

Concealment of Authors' and Reviewers' Identities in Peer Review

Chair:

Mildred Cho

Stanford Center for Biomedical Ethics
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Presenters:

Craig Bingham

Medical Journal of Australia
North Sydney, Australia

Susan van Rooyen

British Medical Journal
London, United Kingdom

Reporter:

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The panel presented results of studies that addressed how concealing authors' identities from reviewers and concealing reviewers' identities from authors and co-reviewers affect the quality of peer review.

Mildred Cho presented results of a study conducted by a consortium of 9 journals. The hypotheses of the study were that concealing authors' identities from reviewers (here called "masking") improves review quality and would be successful in keeping reviewers from knowing authors' identities. Twenty manuscripts from several journals were selected, and at least two reviewers—one masked and one unmasked—were assigned to each manuscript. Unaware of which reviewer was masked, editors rated overall quality of masked and unmasked reviews for each manuscript on a scale of 1 to 5. No significant differences were found in review quality. The study revealed variation in reviewers' ability to guess the authors; a

later study attributed this variation to the reviewers' years of experience in reviewing, writing articles, and conducting research.

Susan van Rooyen discussed 2 studies in which the terminology differed from that of Cho's study: concealment of authors' identities was referred to as "blinding", concealment of reviewers' identities from authors and co-reviewers was "masking", and revealing of reviewers' identities to authors was "open review". The first study asked

- Is blinding possible?
- Does masking affect the quality of

Open peer review would act as a quality-control process.

reviews?

One journal supplied 527 manuscripts, which were each sent to one blinded and one unblinded reviewer. Reviewers were randomly chosen to be masked or unmasked. Editors were asked to rate the quality of 7 specific aspects of the reviews and overall quality. Of the reviewers, 58% could not guess author identity; 33% identified authors correctly, and 9% identified at least one author. The study found no significant difference in the quality of the reviews.

The same journal supplied 125 manuscripts for the second study, which asked

- Does open review lead to reduced review quality?
- Would reviewers consent to open review?

Reviewers were randomly assigned to do open or closed reviews. The study found no significant difference in quality of the reviews but slightly more reviewers were likely to decline open reviews or to

recommend that open-reviewed manuscripts not be published.

Craig Bingham argued that open peer review would act as a quality-control process. Only editors now have access to all author and reviewer documents. With so much more power and control than others, Bingham said, editors have more opportunity to act with bias or make mistakes, but no one checks their decisions.

Bingham suggested opening peer review not only to editors, reviewers, and authors, but also to readers, who would benefit from seeing the process that led to publication, and to a wider circle of peers or consultants. Consultants would perform several functions, Bingham said, including offering additional perspectives, serving as reader representatives, and keeping an ethical check on the peer-review system.

Bingham described a small study conducted at the *Medical Journal of Australia* (MJA) in which authors and reviewers were asked to publish unedited articles with reviewer comments; 80% of authors and 90% of reviewers agreed. The reviews were accessed by 25% of readers, but few submitted comments. Those results, Bingham said, suggest that authors and reviewers are ready to consider new systems and that, although reader comments are no substitute for peer review, readers can offer fresh perspectives. He added that the Internet makes open-review systems possible. Open peer review, Bingham said, produces a more collaborative, scholarly process than the secretive system now in place.

The MJA is conducting studies of open peer review using the Internet. See www.mja.com.au/public/papers/papers.html for more information. 