# *Achieving Transparency in Reporting Health Research*

*Moderator:*
**Tom Lang**
Tom Lang Communications
Davis, California

*Speakers:*
**Doug Altman**
Wolfson College
Oxford, United Kingdom

**David Moher**
University of Ottawa
Ottawa, Ontario

*Reporter:*
**Heidi Logothetti**
American College of Obstetricians and Gynecologists
Washington, DC

It may seem that new acronymic checklists for authors of biomedical articles to submit with their manuscripts appear all too frequently. Why should authors of randomized trials, for instance, write up their findings according to the recommendations of the Consolidated Standards of Reporting Trials (CONSORT)? Doug Altman and David Moher addressed that question and introduced the EQUATOR network, whose Web site (*www.equator-network.org/*) hosts some 80 checklists and other resources for promoting transparent reporting of research.

Altman explained why transparency is important to the scientific community. Sound biomedical research creates new knowledge and affects current practice. But how valuable is good research that is never published or is reported badly? How can readers determine a study's relevance or reliability? Muddled reporting of good research may lead to its never being published. Muddled reporting of poor research may lead to the publication of erroneous information. Altman stated that "good reporting is not something that is optional. It is an absolutely key part of research"; he called such reporting "a moral responsibility".

The problem is widespread and exacerbated by the "multiple readerships" of articles—clinicians, editors, potential funders, and other researchers. An author may be tempted to "sex up" findings to interest the first three of those readerships by overstating the discussion or glossing over unfavorable results. Transparency is rarely given high priority, and authors give insufficient attention to the materials and methods and results sections.[1] Funders, researchers, editors, and reviewers all contribute to the problem.

Such practices create difficulties for authors of meta-analyses, who depend on trial authors to report key aspects of a trial fully and clearly, and for researchers who attempt to reproduce trial results and test their validity. The EQUATOR network addresses the deficiency by identifying and disseminating guidelines for biomedical journals to follow. The 22-item CONSORT checklist is probably the best known.

Moher emphasized that the CONSORT checklist represents the smallest amount of information that should be reported. Because most of the audience consisted of journal editors and staff, he highlighted the journal's importance as a means of disseminating information. Journals' quality-control mechanisms (their author submission information, the peer-review process, and editorial policies) are somewhat heterogeneous. Moher encouraged the audience to "empower readers" by adopting uniform standards and thereby promoting clear reporting. To a question on how authors could fulfill a hefty list of requirements and remain within journal word counts, Altman and Moher replied that high priority should be given to the materials and methods and results portions of manuscripts, because these sections contain the substance of the study.

Moher then stated that the adoption of standards (the "intervention") has improved the quality of research but that the effect has been weak; he attributes this to slow uptake by authors and editors. According to recent studies, only about 39% of editors followed CONSORT guidelines, and only 23 journals mentioned CONSORT in their author submission information.

Altman and Moher invited the audience to scrutinize how well two published randomized controlled trials met CONSORT criteria. The group agreed that, even where such an item as method of randomization appeared to be addressed, the reporting of the methods and results in both articles was often too vague and incomplete to allow evaluation or reproduction of the experiment.

The speakers concluded that guidelines, such as those collected by the EQUATOR network, help to raise the quality of reporting but that much remains to be done. Everyone responsible for creating and disseminating scientific information should work toward increasing the transparency of scientific reporting. Although transparency will not transform bad studies into good studies, it will allow readers to judge what is valuable new knowledge—and what is not.

## Reference

1. Chan AW, Altman DG. Epidemiology and reporting of randomised trials published in PubMed journals. Lancet. 2005;365(9465):1159-1162.