


# MORE TRANSPARENCY, BETTER RESEARCH

*To win back the public's trust, medical scientists must seek a new era of improved research ethics and transparency.*

 by Jimmy Volmink



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In recent years, instances of scientific fraud, errors in analysis, publication bias and failure to reproduce research results have been uncovered across a range of medical and scientific research disciplines. Greater transparency can help address these problems, improve accountability and restore the public's confidence in science.

In healthcare, clinical trials form the cornerstone of efforts to discover what works, and what does not work. People participate in such studies because they believe the research will improve future treatment for those with similar conditions. Unfortunately, trial findings are often not reported in full, and in many cases are not published at all, sometimes with dire consequences for patients.

This indefensible practice of non-disclosure is being met with an expanding global response. A decade ago the World Health Organization (WHO) and others called for clinical trials to be publically registered, at inception. More recently the WHO went further, calling for the public disclosure of key trial findings within 12 months of study completion. This latest recommendation follows the AllTrials campaign call for registration and reporting of results, which has already won the support of 86,000 patients, clinicians and researchers worldwide, plus 612 organisations representing millions of others.

Transparency in medical research is being promoted in other ways, no less important. Health research has been at the forefront of open access publishing, a movement calling for free access to research studies published in professional journals; in the past, such journals



allowed access only to those willing to pay substantial subscription fees.

Yet, access to a published study, even in a reputable journal, is no guarantee that the study's findings are valid and reliable. Various strategies to promote data-sharing have therefore been introduced to allow outside parties to check published research results for false conclusions and other problems.

Biased 'cherry-picking' of certain studies or relying on the results of studies that are too small or are methodologically flawed, can lead to poor decisions regarding the choice of healthcare or the need for future research. The Cochrane Collaboration, an independent organization operating in 130 countries, is addressing this challenge by producing systematic reviews of research to help people make more informed decisions.

All these initiatives provide a solid foundation for building a culture of transparency in health research. However, additional measures to minimise perverse incentives in the conduct of research, reporting bias and scientific fraud will be needed. ■