1. Shortcomings in health research reporting: growing concern about research reliability

Complete, accurate and transparent reporting is an integral part of responsible research conduct. However, a growing number of studies investigating the quality of reporting provides evidence of major problems occurring in scientific publications. These prevent critical assessment of the quality and relevance of the research, undermine confidence in the results and limit further use of such research. The following practices cause major concern:

- Non-reporting or delayed reporting of whole studies
- Selective reporting of only some outcomes
- Omission of crucial information in the description of research methods and interventions
- Inadequate statistical reporting
- Presenting data (graphs) in confusing or misleading ways
- Omissions or misinterpretation of results in abstracts

2. Reporting guidelines: tools for improvement of health research reports

Reporting guidelines provide advice on how to report research studies:

- Usually in the form of a checklist, flow diagram or explicit text
- Specify a minimum set of items required for an accurate and transparent account of what was done and what was found in a research study, reflecting in particular issues that might introduce bias into the research
- The most widely recognised guidelines are based on evidence and reflect consensus opinion of experts in a particular field, including methodologists and journal editors
- Reporting guidelines complement advice on scientific writing and journals’ instructions to authors
- Examples of reporting guidelines include these statements: CONSORT (for randomised controlled trials) PRISMA (for systematic reviews and meta-analyses) STARD (for diagnostic accuracy studies) STROBE (for observational studies)

3. The EQUATOR Network: helping authors, editors and peer reviewers to improve the clarity and completeness of research reports

The EQUATOR Network is a new international initiative that seeks to improve the reliability of published health research by promoting transparent and accurate reporting. The EQUATOR team collaborates closely with scientists, journals, reporting guidelines developers, educators, and research funders.

The EQUATOR Network has seven major goals:

1. Develop a comprehensive internet-based resource centre providing up-to-date information, tools and other materials related to health research reporting.
2. Assist in the development, dissemination and implementation of robust reporting guidelines.
3. Actively promote the use of reporting guidelines and good research reporting practices through an education and training programme.
5. Conduct regular audits of reporting quality across the health research literature.
6. Set up a global worldwide network of EQUATOR collaborators.
7. Develop a general strategy for translating principles of responsible research reporting into practice.

The EQUATOR Network can substantially contribute to the prevention of poor reporting and increase reliability of published health research.

The EQUATOR Network Steering Group:

- Iveta Simera, Head of Programme Development, iveta.simera@csm.ox.ac.uk
- Allison Hirst, EQUATOR Research Fellow, allison.hirst@csm.ox.ac.uk
- Centre for Statistics in Medicine, Wolfson College Annexe, Long Rd, Oxford, OX2 6UD, UK

Adherence to reporting guidelines helps to achieve high standards in reporting health research studies.

Educating young research students and professionals helps to introduce good research reporting skills at the beginning of their professional career and prevent poor reporting practices.

Wider awareness and use of the EQUATOR Network resources together with other safeguards (e.g. mandatory trial registration, public availability of research protocols, etc.) can considerably increase reliability of published health research.

The EQUATOR Network can substantially contribute to the prevention of poor reporting and introduction of best reporting practice. This effort needs to be strongly supported by research funders and regulatory bodies.

Contact:

- Dr Iveta Simera, Head of Programme Development, iveta.simera@csm.ox.ac.uk
- Allison Hirst, EQUATOR Research Fellow, allison.hirst@csm.ox.ac.uk
- Centre for Statistics in Medicine, Wolfson College Annexe, Long Rd, Oxford, OX2 6UD, UK

www.equator-network.org