Who should be involved in improving research publications?

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Q: Who should be involved in improving research publications?
A: EVERYBODY!

Publication dystopia
- Research is poorly reported
- Methods cannot be repeated
- Important elements are missing
- Negative results are excluded
- Reports are unusable
- Data is lost / cannot be shared

Much published research is unusable
- Of 102 journal articles reporting clinical trials, 62% had a change to the primary outcome stated in the protocol
- Of 88 studies using novel questionnaires only 8% of questionnaire could be accessed
- Of 141 studies of test accuracy, 40% did not report participants’ age and sex
- Of 49 AIDS trials, only 33% reported all adverse events

All refs in Glasziou et al Lancet, 2014

Much research is never published

Of EU-funded health research 1998-2006
- 50% unpublished
- 570 million Euros of research had “no detectable academic output”

Situation may be improving but evidence-base for most prescribed medicines is badly affected by non-publication

Until recently, 50% of clinical trials were unpublished

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Galsworthy et al Lancet 2012;380:971
Inadequate treatment descriptions in 80 studies of medical therapies from journal article and supplementary info

Who might be involved in improving research publications?
- Researchers
- Institutions
- Funders
- Regulators
- Editors
- Peer reviewers
- Publishers
- Communications experts
- Users

Reporting = article + protocol + materials + data + … + links

What is research reporting?

Design
- Protocol
- Patient information
- Statistical analysis plan
- Trial registration
- REC submission
- Investigator information

Analysis
- Study report
- Journal articles
- Results posting
- Conference abstracts
- Clinical trial registration
- Clinical trial results

Conduct
- Raw data
- Investigator information
- Patient information
- Clinical trial registration
- Clinical trial results

Reporting
- Conference abstracts
- Journal articles
- Results posting
- Clinical trial registration
- Clinical trial results
- Investigator information
- Patient information

What is currently linked?

What could be linked?
It won’t fit!

Threaded publications (not a new idea!)

- “Electronic publication of a protocol could be simply the first element in a sequence of “threaded” electronic publications, which continues with reports of the resulting research … followed by deposition of the complete data set”

Chalmers & Altman, Lancet 1999; 353:490-3

Who are the ‘publishers’?

- Ethics committees
- Funders
- Regulators
- Trial registers
- Institutions
- Researchers
- Conferences
- Journals

Potential ‘disseminators’ (and quality controllers)

- Ethics committees
- Funders
- Regulators
- Trial registers
- Institutions
- Researchers
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- Journals

Power vs responsibility

- Ethics committees
- Funders
- Regulators
- Trial registers
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Current situation for publications

Conclusions

- Improving research reporting is everybody’s responsibility
- Reporting is about more than just journal articles
- Focusing on author responsibility (eg reporting guidelines) can only produce small improvements
- We need more fundamental change to the whole reporting system