Librarians can help address reporting concerns in the biomedical literature particularly, for systematic reviews – here's how!

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Common deficiencies in biomedical research reporting

Deficiencies in biomedical research reporting

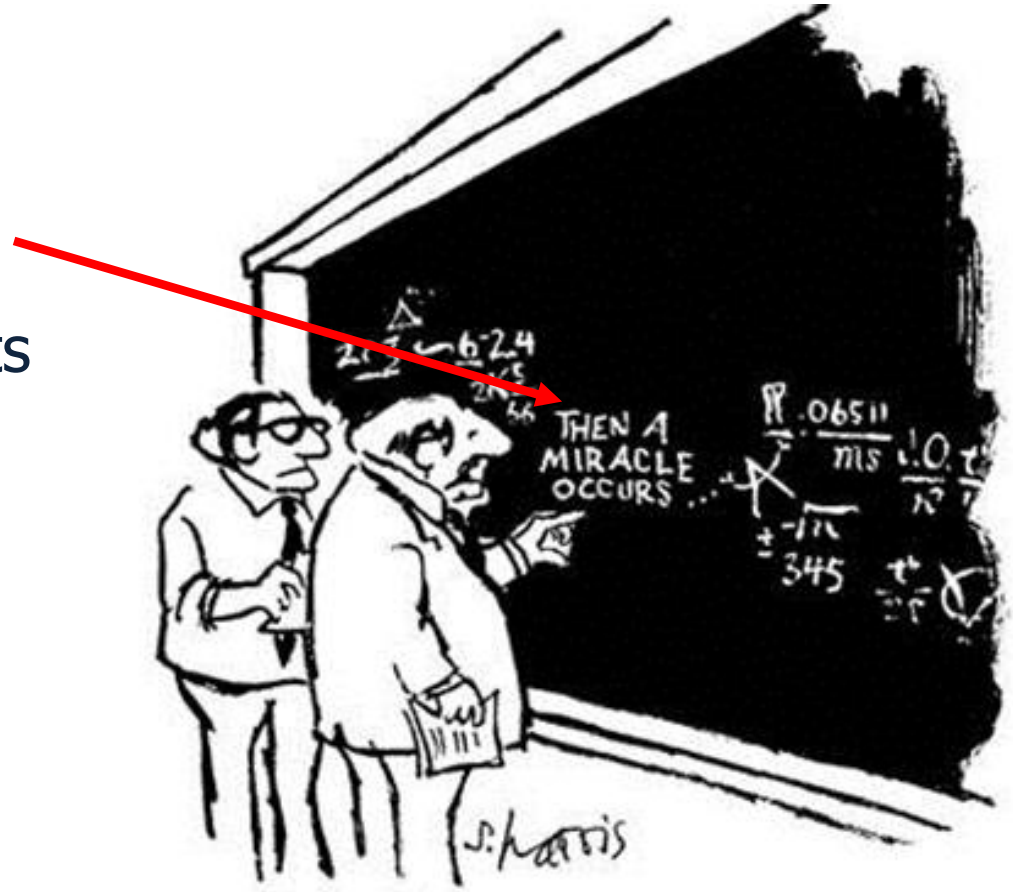
- A research article is often the only available record that a research study was conducted
- Scientific manuscripts should present sufficient data so that the reader can fully evaluate the information
- Readers need a clear understanding of exactly what was done and found

5 main areas where deficiencies have been identified

- Non-reporting (or delayed reporting) of studies
  - often studies with disappointing results
- Incomplete reporting
  - e.g. the omission of crucial aspects of the research methods, incomplete results or inadequate reporting of harms
- Selective reporting
  - e.g. selectively reporting patient outcomes or aspects of the analysis
- Misleading reporting
  - e.g. misinterpretation of study findings or using 'spin'
- Unacknowledged discrepancies between sources
  - E.g. where the publication conflicts with the study protocol or the information contained in the register

Incomplete or unclear reporting

- Hundreds of published reviews show that key elements of *methods* and *findings* are commonly missing from journal reports



"I think you should be more explicit here in step two."

from *What's so Funny About Science?* by Sidney Harris (1977

Research

Impact of document type on reporting quality of clinical drug trials: a comparison of registry reports, clinical study reports, and journal publications

What is missing from descriptions of treatment in trials and reviews?

Replicating non-pharmacological treatments in practice depends on how well they have been described in research studies, say **Paul Glasziou** and **colleagues**

Have you ever read a trial or review and wondered exactly how to carry out treatments such as a "behavioural intervention."

receiving numerous requests for additional details from doctors and patients, the author of a randomised trial on graded exercise for

Exercise prescription: a case for standardised reporting

Susan Carolyn Slade, Jennifer Lyn Keating

ABSTRACT

Background Structured, regul
recommended to improve health
takes many forms and varies in t
and frequency. The authors used
exercise for chronic health condi
exercise programmes are descri
c reviews.
Two independent rev
f exercise reporting pr
of exercise effects for
terial. Inclusion criteri
narised the effects of
with chronic health conditions. Exclusion
views of studies of children and adolescent

Empirical Evidence for Selective Reporting of Outcomes in Randomized Trials

Comparison of Protocols to Published Articles

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Context Selective reporting of outcomes within published studies based on the nature or direction of their results has been widely suspected, but direct evidence of such bias is currently limited to case reports.

Objective To study empirically the extent and nature of outcome reporting bias in a cohort of randomized trials.

Design Cohort study using protocols and published reports of randomized trials approved by the Scientific-Ethical Committees for Copenhagen and Frederiksberg, Denmark, in 1994-1995. The number and characteristics of reported and unreported trial outcomes were recorded from protocols, journal articles, and a survey of trialists. An outcome was considered incompletely reported if insufficient data were presented in the published articles for meta-analysis. Odds ratios relating the completeness of outcome reporting to statistical significance were calculated

Selective publication of studies with statistically significant results has received widespread recognition.[1] In contrast, selective reporting of favorable

ARTICLE

Adequacy of Published Oncology Randomized Controlled Trials to Provide Therapeutic Details Needed for Clinical Application

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Background Randomized controlled trials (RCTs) improve clinical care through eviden
RCT result reporting, but specific details of therapeutic administration pron
tion of the trial design. We assess the reporting methodology in RCTs pub

Methods Ten essential elements of RCT reporting were identified and included d
maximum number of cycles, premedication, growth factor support, patien
adjustments for hematologic and organ-specific toxicity. All therapy-base
2005 and 2008 in the *New England Journal of Medicine (NEJM)*, *Journal of Clinical Oncology (JCO)*, *Journal of*

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An appeal to medical journal editors: the need for a full description of laboratory methods and specimen handling in clinical study reports

Reporting of adverse events in randomized controlled trials of highly active antiretroviral therapy: systematic review

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Support, Aalborg University, Aalborg, Denma

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Publication Bias in Antipsychotic Trials: A Efficacy Comparing the Published Literat Food and Drug Administration Database

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Reporting and Interpretation of Randomized Controlled Trials With Statistically Nonsignificant Results for Primary Outcomes

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Susan Dutton, MSc
Philippe Ravaud, MD, PhD
Douglas G. Altman, DSc

Context Previous studies indicate that the interpretation of trial results can be distorted by authors of published reports.

Objective To identify the nature and frequency of distorted presentation or "spin" (ie, specific reporting strategies, whatever their motive, to highlight that the experimental treatment is beneficial, despite a statistically nonsignificant difference for the primary outcome, or to distract the reader from statistically nonsignificant results) in published reports of randomized controlled trials (RCTs) with statistically nonsignificant results for primary outcomes.

Data Sources March 2007 search of MEDLINE via PubMed using the Cochrane Highly Sensitive Search Strategy to identify reports of RCTs published in December 2006.

ACCURATE PRESENTATION OF the results of a randomized controlled trial (RCT) is the cornerstone of the dissemi-

RESEARCH ARTICLE Open Access

Electronic search strategies to identify reports of cluster randomized trials in MEDLINE: low precision will improve with adherence to reporting standards

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