

‘Empty Review’ Reporting Practices and Policies: A Survey of Cochrane Review Group Editors and Other Key Systematic Review Producers

Paul Montgomery

Centre for Evidence-Based Intervention
University of Oxford

Joanne Yaffe

College of Social Work
University of Utah

Lindsay D. Shepard

College of Social Work
University of Utah

Matthew Morton

Centre for Evidence-Based Intervention
University of Oxford

Sally Hopewell

Centre for Statistics in Medicine
University of Oxford



Disclosure of Funding and Col

- Funding: The Cochrane Empty Reviews Project is funded by the Cochrane Opportunities Fund (<http://www.cochrane.org>). The funders had no role in study design, data collection and analysis, decision to present, or preparation of the presentation.
- Competing Interests: PM is the author of several empty reviews published by the Cochrane Collaboration.

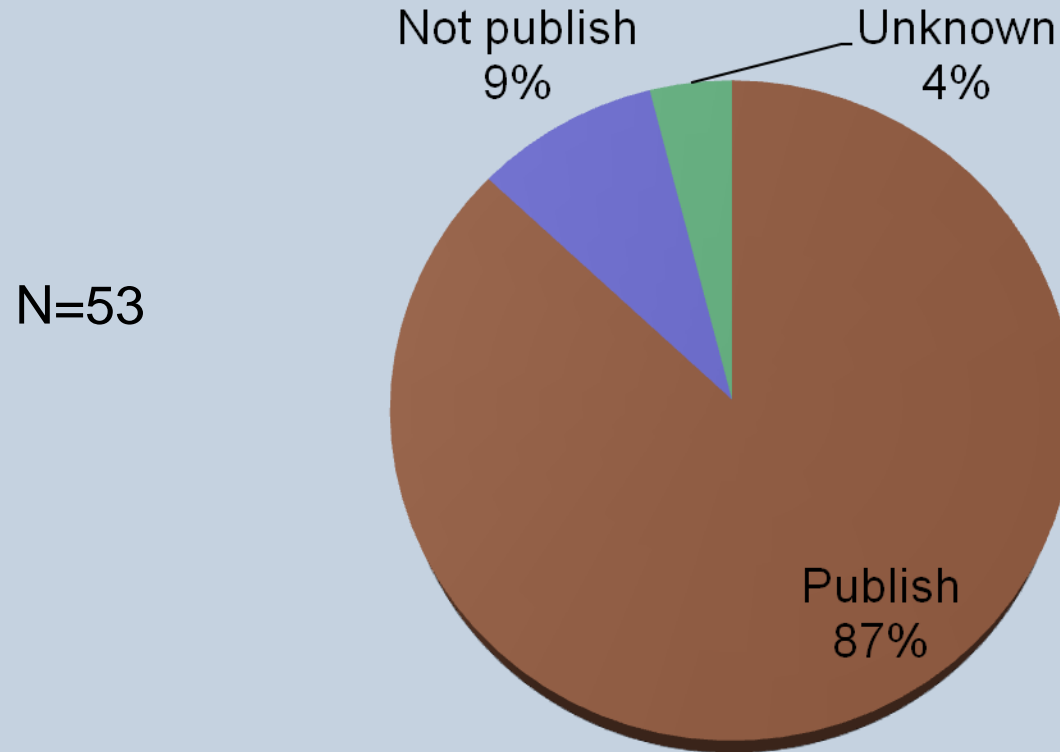


What is an Empty Review?

- Systematic reviews play an essential role in informing evidence-based policy and practice decisions
- Sometimes, however, reviewers do not find any studies meeting the review's *a priori* specified eligibility criteria
 - 376 empty reviews (8.7% of Cochrane's total) in August 2010 (Yaffe et al., 2012)
 - 8.9% of the Campbell Library currently consists of empty reviews



Cochrane Groups publish empty reviews?



Why are Some Reviews Empty?

- Intervention too new to be rigorously evaluated
- Nature of the intervention may not lend itself to RCTs
- Review question or criteria are poorly constructed
- Lack of support to fund primary evaluations



Significance of Empty Reviews

- How authors deal with ‘empty reviews’ can affect how readers interpret and apply them to health policy and practice
- Authors may report conclusions inconsistent with lack of ‘included evidence’ (Green et al. 2007; Lang et al. 2007)
- Implications for practice from empty reviews may be particularly troubling



Why is guidance needed?

- There is limited literature discussing how to handle empty reviews
- Previously proposed guidance (Lang et al. 2007) may have flaws
 - ‘Discuss results from less rigorous designs in excluded studies’
 - ‘Suggest different eligibility criteria for different reviews’
- It is important to empirically indicate where rigorous evaluation research is lacking



The Current Study

- Examine current practices of authors and publishers regarding empty reviews
- Identify policies and procedures across Cochrane, Campbell, and other review groups:
 - Publish empty reviews?
 - Guidance for reporting conclusions and implications for practice?
 - How to handle excluded studies?



Sampling

- In 2011, contacted managing editors from:
 - All 53 Cochrane Review Groups
 - Joanna Briggs Institute (JBI)
 - Social Care Institute for Excellence (SCIE)
 - What Works Clearing House (WWCH)
 - World Health Organisation (WHO)
 - Campbell Collaboration's 4 coordinating groups (in 2013)



Brief Email Questionnaire

- Closed and open-ended questions about empty review policies
- Contacted by email three times and as needed phone follow up
 - 100% response rate
- Double-coded & analysed
 - Disagreements discussed and resolved



Publishing Empty Reviews—Cochrane Groups

- For 13 Groups (29%), relevance of the question influenced the likelihood of publication
- For 8 Groups (17%), possibility to direct future research
 - “Importance on establishing gaps in the evidence”
 - Dependent on whether RCTs are possible for the intervention



Publishing Empty Reviews—Others

- Campbell groups did not have a formal policy
 - 3 (75%) had not published any empty reviews
 - 1 (25%) suggested an informal policy of scoping the literature and forming an important, well-framed question
- Only 1 of the other 4 (WWCH, SCIE, JBI, WHO) publishes empty reviews
 - WWCH will produce empty reviews, but still produce “Practice Guidelines”



Reasons for Not Publishing Empty Reviews

- 5 Cochrane Groups (9%) required a minimum number of RCTs
 - “Empty reviews or those with [few] studies [are] a colossal waste of everyone’ s time and energy”
 - Potential deleterious effect on impact factor due to less citations
- SCIE does initial scoping to ensure included studies
 - “As public charity, cannot spend money on empty reviews”
 - Broaden eligibility criteria if a review is empty



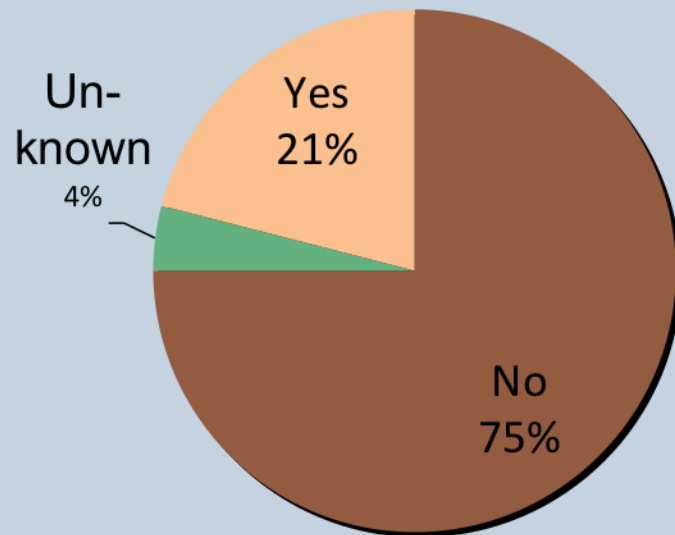
Reasons for Not Publishing Empty Reviews

- JBI has authors explicitly discuss in protocols how inclusion criteria will be expanded if initial search is empty
- WHO searches for best available evidence and base recommendations on what is found

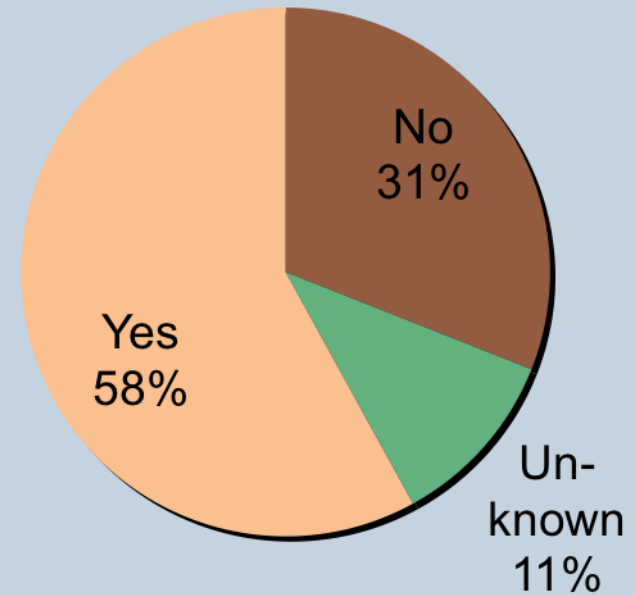


Handling Excluded Studies—Cochrane Groups

Standard policy?



Permit discussion of excluded studies?



Section 7.25 of Cochrane Handbook: Excluded Studies

*“A Cochrane review includes a list of excluded studies, **detailing any studies that a reader might plausibly expect to see among the included studies**. This covers all studies that may on the surface appear to meet the eligibility criteria but on further inspection do not, and also those that do not meet all of the criteria but are well known and likely to be thought relevant by some readers. By listing such studies as excluded and **giving the primary reason for exclusion**, the review authors can show that consideration has been given to these studies. The **list of excluded studies should be as brief as possible**. It should not list all of the reports that were identified by a comprehensive search. It should not list studies that obviously do not fulfil the entry criteria for the review as listed under ‘Types of studies’, ‘Types of participants’, and ‘Types of interventions’, and in particular should not list studies that are obviously not randomized if the review includes only randomized trials.”*

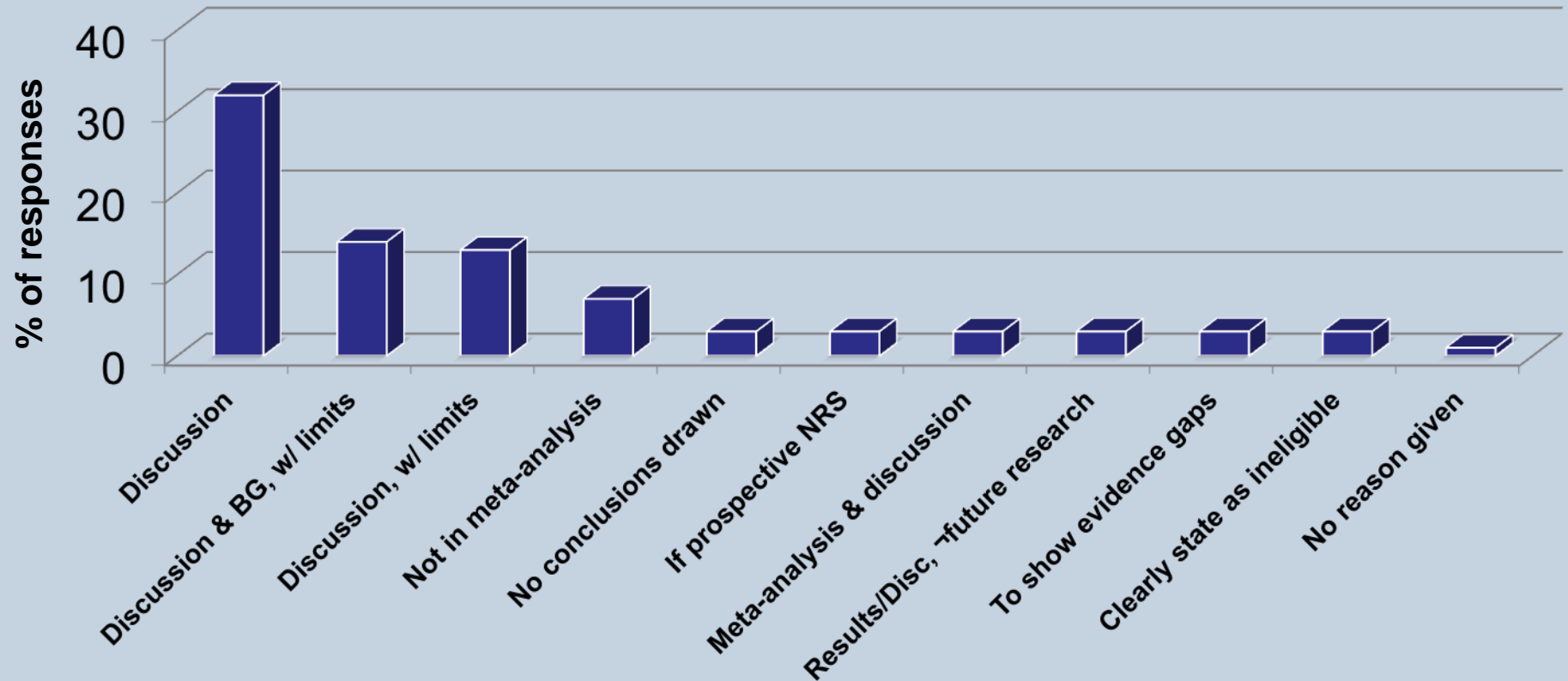


Handling Excluded Studies—Cochrane Groups

- 40 (75%) had no *standard* policy for handling excluded studies
 - 7 (13%) reference Cochrane Handbook
- 31 (58%) allow provision of evidence from excluded studies
 - 10 of these specified it should only be in the discussion; 1 allowed in results
 - 4 also require clear signposting of limitations of excluded study findings
- 16 (30%) would not allow excluded study evidence
- 6 (12%) had unknown policy: depends on topic & exclusion reasons



Conditions for 'excluded study' evidence (N = 31)



Handling Excluded Studies—Other Groups

- Campbell Groups broadly agree that discussing excluded study results is unacceptable
- Other groups (JBI, WWCH, WHO) generally only stated that tables of excluded studies were needed



'Implications for Practice' — Cochrane Groups

- 44 (83%) did not offer empty review guidance for this section
 - 3 simply referred to the Handbook
 - 3 referred authors to previous reviews
- 7 (13%) stated they would provide more detailed, specific guidance for empty review authors on a case-by-case basis



‘Implications for Practice’ —Other Groups

- Campbell Groups did not have any specific policies
- Largely inapplicable to other review producers



Updating and Withdrawing Empty Reviews

- 46 Cochrane Groups (87%) do not aim to update or withdraw empty reviews in shorter timeframe than other reviews
- 5 Cochrane Groups (9%) specifically aim to update or withdraw empty reviews in a shorter timeframe
 - One group “re-runs searches on an annual basis”
- No other global review producers had policies



Overall Findings

- Mixed opinions amongst review producers about the value that empty reviews add to the research and practice community
 - Differing perspectives may reflect different incentives, governance, and audiences
- Considerable variation in publishing, reporting, and updating empty reviews
 - Groups commonly based decisions on perceptions of the potential value of an empty review
- General lack of guidance on how to report excluded studies in empty reviews



Recommendations to Consider

- Cochrane to address importance of an empty review at title registration
 - ‘If you think this review might be empty, please give your reasons why you feel it is important to do the review.’
- Stress value of empty reviews in handbooks/guidance
 - Global review producers have different conceptualisations and policies
- Develop ‘empty review’ guidance for handling excluded studies and updating searches



Acknowledgements

- Wayne Bateman
- Sean Grant



Thank you!

- Questions?
- Contact details:
 - Paul Montgomery: paul.montgomery@spi.ox.ac.uk
 - Joanne Yaffe: joanne.yaffe@utah.edu

