

SWAR 42: Impact of excluding conference abstracts when undertaking a systematic review

Objective of this SWAR

The objectives are to: (1) quantify the time taken to search for and screen conference abstracts for possible inclusion in a systematic review; (2) quantify the number of included studies and publications that are found only as, or through, the identification of conference abstracts; and (3) determine the impact of such studies and publications on the findings of a systematic review.

Study area: Study Identification

Sample type: Review Authors

Estimated funding level needed: Very Low

Background

There has been long-standing debate about whether systematic reviews should include studies, such as those presented at conferences, that have not been published in a peer reviewed journal.[1] In some instances, the identification of a conference abstract allows the reviewers to run dedicated searches that identify a full publication of the study or to collect additional information from the original researchers. In other instances, the conference abstract itself might be the only source of data on the study.

A recent systematic review of rapid review methods did not include any reviews or studies looking at the impact of excluding conference abstracts,[2] and the updated recommendations for Cochrane rapid review methods guidance did not address the impact of excluding conference abstracts.[3]

In 2017, Hartling et al. examined a sample of systematic reviews and found that although most searched for unpublished studies, 94% did not include any. Across their sample, unpublished studies represented 2% of included studies, and only in one review was a substantial impact of including unpublished studies observed.[4] In 2019, Scherer and Saldanha considered the arguments for and against including conference abstracts, including the potential impact of publication bias, and advised a nuanced approach to inclusion considering the scope of the review.[5] A 2017 Cochrane Methodology Review based on data from 425 reports (307,028 abstracts) found an overall full publication proportion for conference abstracts of 37.3% and that studies with positive results were more likely to achieve full publication.[6]

Both Hartling et al. and Scherer and Saldanha, considered a small number of notable examples of reviews where inclusion of unpublished research did impact the size or precision of the results. Many of these reviews included clinical trials undertaken before prospective registration of trials and publication of their findings were conditions of regulators, ethical bodies, and funders. This changing environment for clinical trials may mean that the impact of excluding data from conference abstracts, and studies identified only through conference abstracts, may have changed over time. In addition, the reviews considered by Hartling et al. and Scherer and Saldanha were all traditional reviews, and the impact of excluding conference abstracts may be different for other types of review, such as scoping reviews, qualitative evidence syntheses, rapid reviews, etc.

This Study Within a Review (SWAR) [7] would provide a means for reviewers to generate evidence on the impact of excluding conference abstracts from systematic reviews of the types of most interest to them. It provides a framework to allow reviewers to identify the costs and benefits for their systematic review of having searched for and included conference abstracts by:

- undertaking their planned review once
- searching for and including conference abstracts
- recording the time taken to work with the conference abstracts
- tracking which, if any, included studies and publications were identified only through conference abstracts
- undertaking a second analysis excluding those studies and publications
- comparing those two analyses

- and considering if, in the context of their review, the difference between the results of those analyses justifies the work involved in searching for and including conference abstracts and studies identified only through conference abstracts (including those for which the conference abstracts is the only source of data).

Interventions and Comparators

Intervention 1: Search for, and include, studies and publications identified only through conference abstracts.

Intervention 2: Do not search for, and do not include, studies and publications identified only through conference abstracts.

Index Type: Searching and identifying studies

Method for Allocating to Intervention or Comparator:

Cross Over

Outcome Measures

Primary: Time taken to search for, screen and extract information from, conference abstracts; number of included studies and publications identified only through conference abstracts (including the conference abstracts themselves); and impact of these studies and publications on the findings of the review.

Secondary:

Analysis Plans

Review teams could consider the costs and benefits for their systematic review of having searched for and included studies and publications identified only through conference abstracts (including the abstracts themselves) and decide whether they will search for and include conference abstracts in a future similar review (perhaps undertaking this SWAR again).

Possible Problems in Implementing This SWAR

Reviewers need to use software or file management processes that enable them to easily and accurately search for conference abstracts, and to identify which included studies and publications were found only through conference abstracts.

References

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2. Haby MM, Barreto JOM, Kim JYH, Peiris S, Mansilla C, Torres M, et al. What are the best methods for rapid reviews of the research evidence? A systematic review of reviews and primary studies. *Research Synthesis Methods* 2024;15(1):2-20.
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Publications or presentations of this SWAR design

Examples of the implementation of this SWAR

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