

Librarians can help to address reporting concerns particularly for systematic reviews

Scale the problem



Workshop leaders

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Evaluating the information retrieval quality and methodological accuracy of Systematic Reviews and Meta-analysis on congenital malformations (2004-2014)

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- ✓ To check if articles using the terms 'systematic review' or 'meta-analysis' in the title accomplish the established requirements, focusing on search and methodology.
- ✓ To observe if librarians have participated in a visible manner in the process.

Our final checklist consists of 20 evaluation criteria

PRISMA

COCHRANE

EUNETHTA

CADTH

NICE

1. Structured summary provided?
2. PICOS questions are explicit in objectives
3. Process for selecting study & data is included
4. Is search data public?
5. Search strategy described (at least 1 DB)
6. Search process fully described & transparent
7. Information sources available
8. Review protocol mentioned
9. Is context checked?
10. Risks of bias described
11. Other languages selected
12. Other reference types used
13. Search updated by the end?
14. Search/Selection conducted by 2 people
15. Information Specialist is mentioned
16. Are synonyms used?
17. Are terms truncated?
18. Controlled vocabulary used
19. Search combines natural language with controlled terms
20. Is the search syntax adapted to each database

162 references

Databases:

Embase + Medline

Subject: congenital
malformations

Ti: SR OR MA

Year: 2004-2014

Lang: English, Spanish,
French, German



	Question	Yes	No	N/A
1	Context is checked?	91,8%	6,6%	1,6%
2	The process for selecting study and data is included?	73,0%	27,0%	0%
3	Structured summary provided?	70,5%	29,5%	0%
4	Information sources are available?	61,5%	36,9%	1,6%
5	Electronic search strategy is described for at least one database?	59,8%	40,2%	0%
6	Risks of bias are described?	50,8%	49,2%	0%
7	Synonyms are used?	47,5%	48,4%	4,1%
8	Other languages are selected?	46,7%	41,8%	11,5%
9	The search or the selection is conducted by two different people?	32,8%	58,2%	9,0%
10	The search date is public?	32,8%	67,2%	0%
11	A controlled vocabulary is used?	30,3%	66,4%	3,3%
12	A review protocol is mentioned?	29,5%	65,6%	4,9%
13	The search combines natural language terms with controlled terms?	28,7%	66,4%	4,9%
14	The search process is fully described and transparent?	27,0%	68,0%	4,9%
15	There are other references types used?	19,7%	77,0%	3,3%
16	PICOS questions are explicit in the objectives?	19,7%	79,5%	0,8%
17	The search syntax is adapted to each database?	13,1%	68,9%	18,0%
18	Terms are truncated?	10,7%	84,4%	4,9%
19	An information specialist is mentioned?	6,6%	93,4%	0%
20	The search is updated by the end of the writing of the article?	0,8%	93,4%	5,7%

Further studies

RESEARCH ARTICLE

Reproducibility of Search Strategies Is Poor in Systematic Reviews Published in High-Impact Pediatrics, Cardiology and Surgery Journals: A Cross-Sectional Study

	Surgery	Pediatrics	Cardiology	Total
Core Search Elements				
Named Database Provider	88 (62)	50 (64)	28 (55)	166 (61)
Named/Inferred Database Provider	105 (73)	57 (73)	34 (67)	196 (72)
Specific Year Given for First Date Searched	91 (64)	51 (65)	22 (43)	164 (60) †* §*
Specific Date Given for Last Date Searched •	106 (74)	52 (67)	37 (73)	195 (72)
Indicated Date Search Was Executed	34 (24)	16 (21)	11 (22)	61 (22)
Indicated Date Search Was Updated	1 (1)	6 (8)	0 (0)	7 (3) †* †*
Provided Specific Search Terms	135 (94)	66 (84)	47 (92)	248 (91) †*
				89 (33) †*** †* §*
				203 (75)
				57 (25)
				57 (25) †*** †**
				56 (24) †**
				35 (15) †*** §**
				59 (22) †*** †**
All Search Strategies were Reproducible \$ #	9 (8)	19 (28)	4 (9)	31 (14) †*** †*

Conclusions

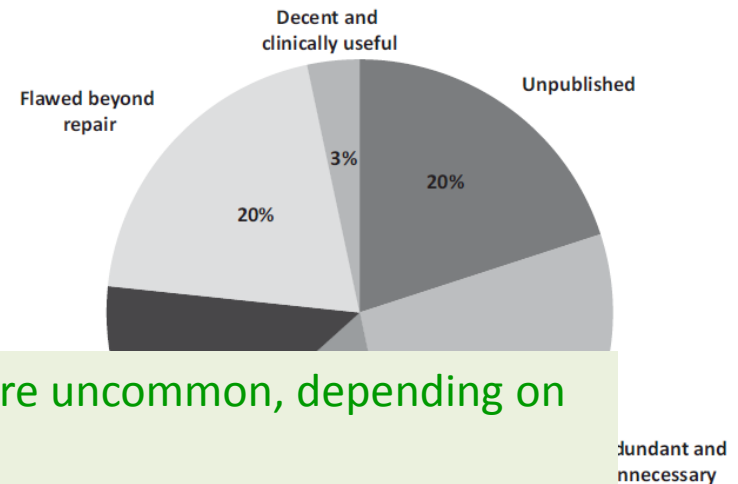
Despite recommendations to report full, reproducible search strategies, many articles still do not. In addition, authors often report a single strategy as covering all databases searched, further decreasing reproducibility. Further research is needed to determine how disciplinary culture may encourage reproducibility and the role that journal editors and peer reviewers could play.

Original Investigation

The Mass Production of Redundant, Misleading, and Conflicted Systematic Reviews and Meta-analyses

- Collaboration, teamwork and replication are uncommon, depending on the fields.
- On many topics, SR and MA are overproduced and that, instead of clarifying the evidence, cause extensive redundancy, little value, misleading claims...
- Biases could be reduced by:
 - ✓ A more shared data,
 - ✓ Better enforcement of study pre-registration, and accessibility of study results
 - ✓ Transparent and complete reporting
 - ✓ An increase of funding and promotion incentives
- Several efforts have been tried to set standards, not only for reporting the results of SR and MA, but also their protocols, design and conduct.

Figure 4. A Summary Overview of Currently Produced Meta-analyses



Epidemiology and reporting characteristics of overviews of reviews of healthcare interventions published 2012–2016: protocol for a systematic review

[Dawid Pieper](#) , [Michelle Pollock](#), [Ricardo M. Fernandes](#), [Roland Brian Buechter](#) and [Lisa Hartling](#)

Systematic Reviews 2017 6:7:

RESEARCH | OPEN ACCESS | OPEN PEER REVIEW


Received: 23 December 2016

Quality of conduct and reporting in rapid reviews: an exploration of compliance with PRISMA and AMSTAR guidelines

[Shannon E Kelly](#) , [David Moher](#) and [Tammy J Clifford](#)

Systematic Reviews 2016 5:79 | DOI: 10.1186/s13643-016-0258-9 | © Kelly et al. 2016

Received: 10 December

 Open Peer Review

Health Information
and Libraries Journal



DOI: 10.1111/hir.12176

Database selection in systematic reviews: an insight through clinical neurology

[Matt Vassar](#), [Vadim Yerokhin](#), [Philip Marcus Sinnett](#), [Matthew Weiher](#), [Halie Muckelrath](#), [Branden Carr](#), [Laura Varney](#) & [Gregory Cook](#)

Oklahoma State University Center for Health Sciences, Tulsa, OK, USA

2017

RESEARCH

OPEN ACCESS


OPEN PEER REVIEW

Searching for qualitative research for inclusion in systematic reviews: a structured methodological review

Andrew Booth 

Systematic Reviews 2016 5:74 | DOI: 10.1186/s13643-016-0249-x | © Booth. 2016

Received: 14 September 2015 | Accepted: 21 April 2016 | Published: 4 May 2016

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Original Article

Methods for documenting systematic review searches: a discussion of common issues

Tamara Rader , Mala Mann, Claire Stansfield, Chris Cooper, Margaret Sampson

First published: 8 October 2013 [Full publication history](#)

DOI: 10.1002/jrsm.1097 [View/save citation](#)

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ORIGINAL ARTICLE

Poor methodological quality and reporting standards of systematic reviews in burn care management

Jason Wasiak , Zephania Tyack, Robert Ware, Nicholas Goodwin, Clovis M Faggion Jr

First published: November 2016 [Full publication history](#)

DOI: 10.1111/iwj.12692 [View/save citation](#)

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Thanks

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