

Types of Literature Reviews

Systematic Review Training

Center for Knowledge Management

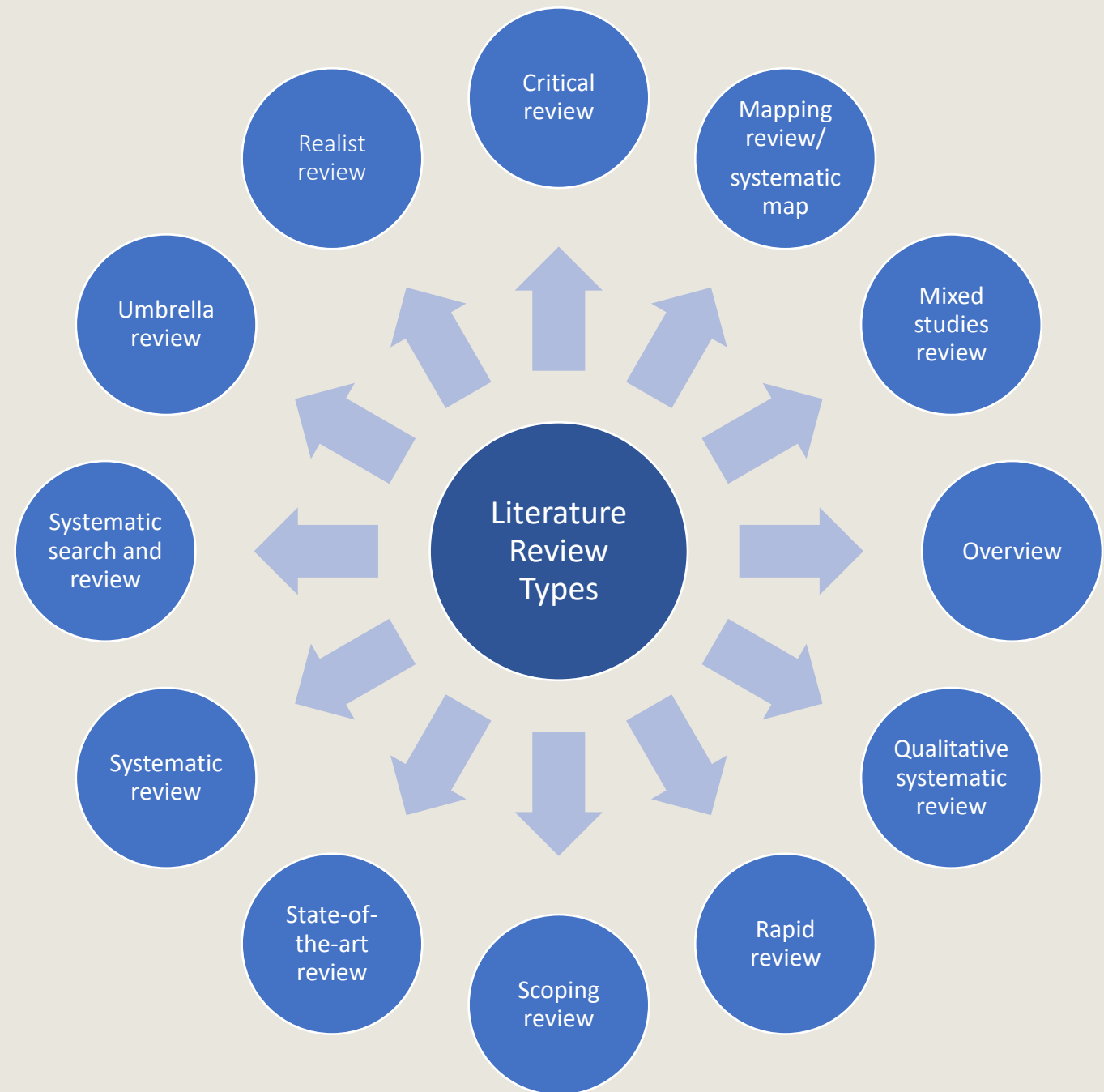
VANDERBILT  UNIVERSITY
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Objectives:

- ✓ *Describe common literature review types*
- ✓ *Describe methodologies used for different review types*

Literature Review Types



Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J.* 2009 Jun;26(2):91-108. doi: 10.1111/j.1471-1842.2009.00848.x. PMID: [19490148](https://pubmed.ncbi.nlm.nih.gov/19490148/).

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Three broad
classes of
literature reviews

Narrative review

Systematic review

Systematic-like
review

Narrative review

- Focuses on creating a synopsis of the most current understanding of a particular topic based on the published literature
- Comprehensive summary of the literature (comprehensive literature review)

Purpose of a narrative review:

- Synthesizes published studies
- Provides an at-a-glance synopsis of the current literature in an easily digested format
- Describes new discoveries or technology, continues to describe the state of the literature, or addresses controversies between approaches
- Documents evolution of therapies or understanding of a disease to provide historical perspective of the literature
- Leads interested individuals to the relevant primary literature

Systematic review

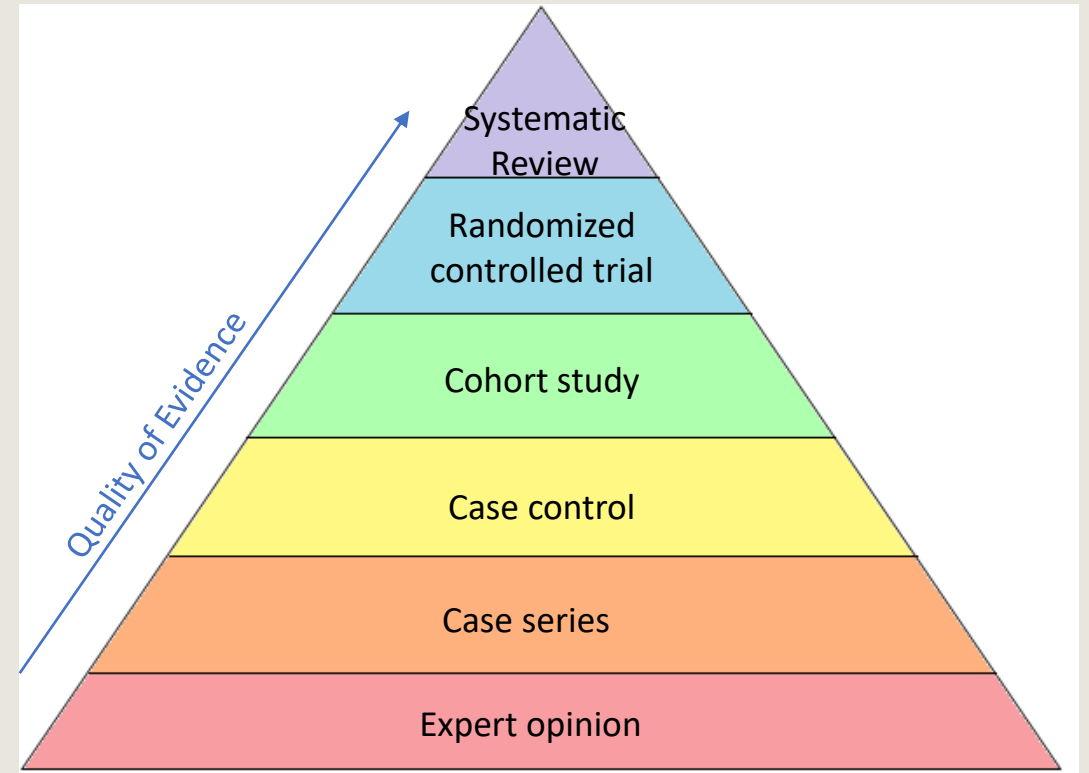
“A review of primary literature in health and health policy that attempts to identify, appraise, and synthesize all the empirical evidence that meets specified eligibility criteria to answer a given research question.

Its conduct uses explicit methods aimed at minimizing bias in order to produce more reliable findings regarding the effects of interventions for prevention, treatment, and rehabilitation that can be used to inform decision making.”

- *MeSH database*

Purpose of a systematic review:

Conducted to aid in decision-making by providing independent, unbiased, objective assessment of evidence



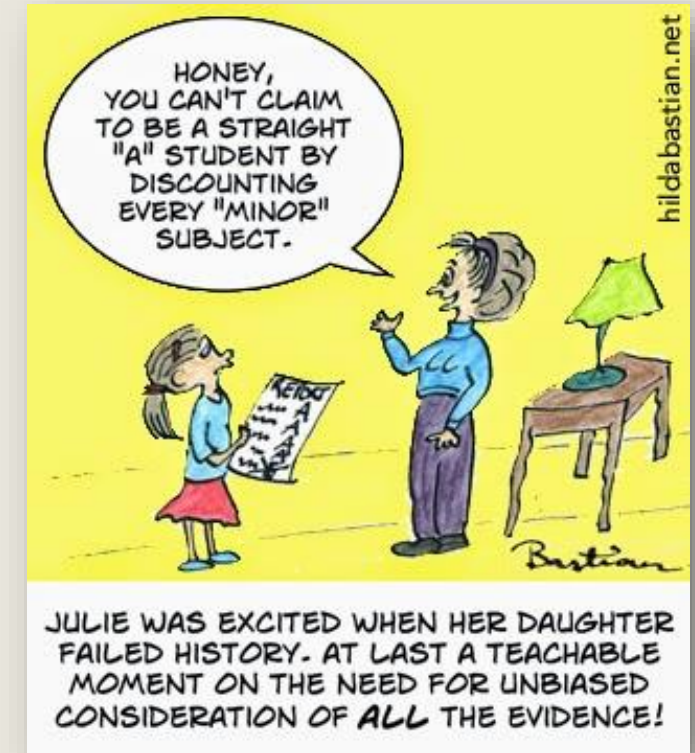
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Systematic Review [Publication Type] as a Medical Subject Heading provided by the National Library of Medicine, National Institutes of Health (U.S.) [cited 2023 Sept 5]; Available from: <https://www.ncbi.nlm.nih.gov/mesh/2028176>.

Burns PB, Rohrich RJ, Chung KC. The levels of evidence and their role in evidence-based medicine. Plast Reconstr Surg. 2011 Jul;128(1):305-310. doi: 10.1097/PRS.0b013e318219c171. PMID: [21701348](https://pubmed.ncbi.nlm.nih.gov/21701348/); PMCID: [PMC3124652](https://pubmed.ncbi.nlm.nih.gov/PMC3124652/).

Systematic review

- Topics are well defined by **Key Questions** devised in collaboration with experts in the field, and entire process is governed by a predefined **Protocol**



<http://statistically-funny.blogspot.co.uk/2013/04/look-ma-straight-as.html#links>

Comparison of narrative and systematic reviews

Category	Narrative Review	Systematic Review
Scope	Unspecified	Narrow
Timeline	Rapid	12-18 months
Protocol	Not required	Required
Systematic Database Searching	Typically conducted	Required
Dual reviewer screening of articles	Not required	Required
Critical appraisal	Variable; can introduce bias	Defined by protocol; assessment of risk of bias in individual studies
Strength of the Evidence	Not required	Required
Synthesis	Qualitative	Qualitative and/or quantitative (meta-analysis)

Fox ZE, Williams AM, Blasingame MN, Koonce TY, Kusnoor SV, Su J, Lee P, Epelbaum MI, Naylor HM, DesAutels SJ, Frakes ET, Giuse NB. Why equating all evidence searches to systematic reviews defies their role in information seeking. *J Med Libr Assoc.* 2019 Oct;107(4):613-617. doi: 10.5195/jmla.2019.707. Epub 2019 Oct 1. PMID: [31607825](#); PMCID: [PMC6774532](#).

Cook DJ, Mulrow CD, Haynes RB. Systematic reviews: synthesis of best evidence for clinical decisions. *Ann Intern Med.* 1997 Mar 1;126(5):376-80. doi: 10.7326/0003-4819-126-5-199703010-00006. PMID: [9054282](#).

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Systematic-*like* Reviews

- Often protocol-driven, with ***selected features of the systematic review*** process, such as:
 - single or dual screening at abstract & full text level
 - evaluation of strength of evidence (SOE)
 - assessment of risk of bias
- Includes overview of the methods in the final publication
- Examples: Scoping review, rapid review, rapid systematic review

Where Systematic and Systematic-like Reviews Differ

	Systematic Reviews	Systematic-like Reviews
Protocol Registration	Register protocol prospectively in an international database	Does not require protocol registration
Time Frame	~12-18 months to complete	< 12 months
Documentation of Methods	Exhaustive	Brief
Quality Assessment	Requires quality assessment of evidence	Does not require quality assessment of evidence
Searching	Comprehensive <i>iterative process</i> (electronic databases, grey literature, hand-searching)	Restricted searching criteria , limited number of databases
Scope	As comprehensive as decided in the Protocol. Length of time involved allows for more comprehensive treatment of the topic	Limited, along with fewer outcomes measured
Risk of bias	Required	Optional or not applicable

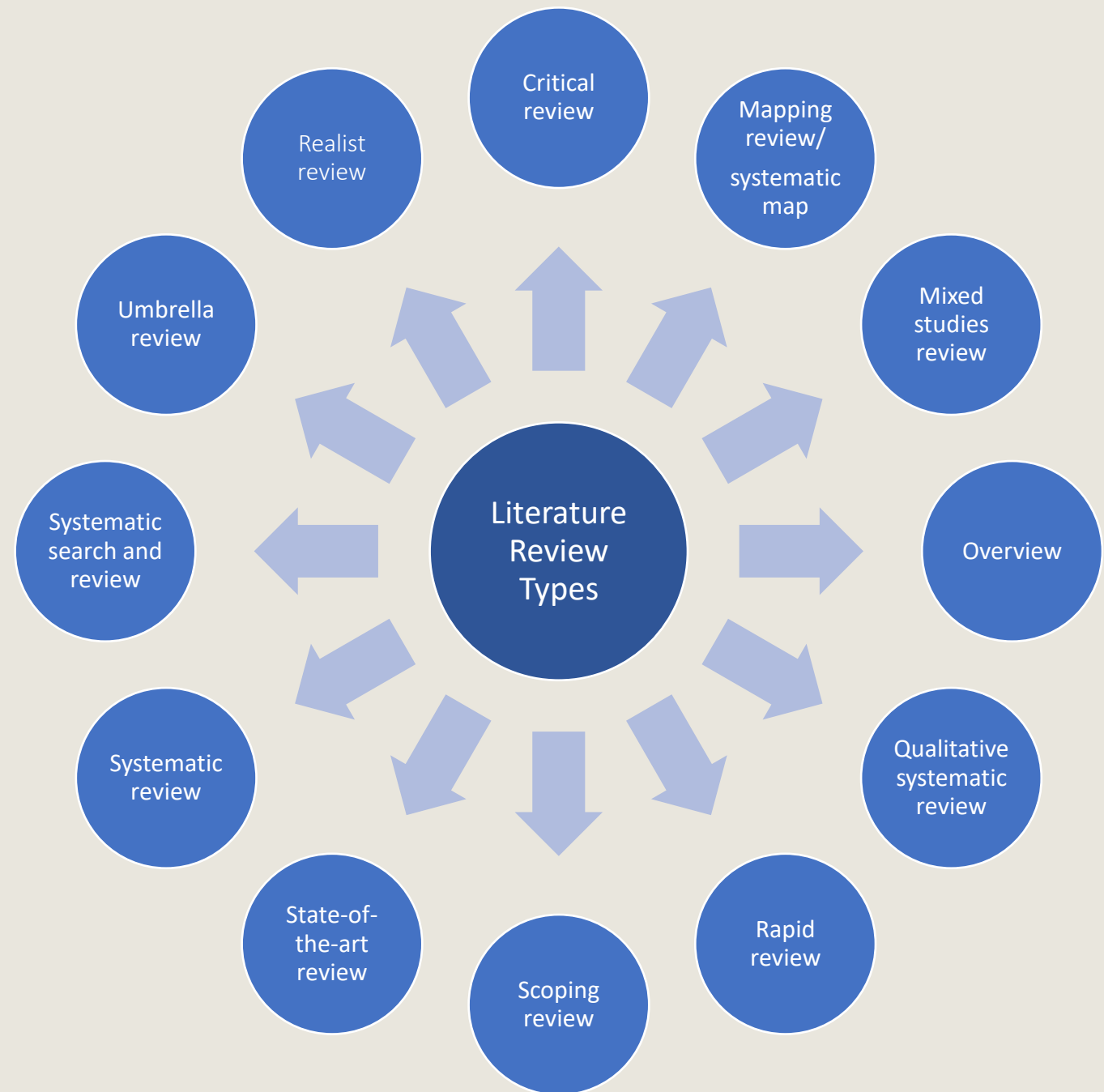
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Review type	Goal	Search	Appraisal	Synthesis
Rapid review	Uses components of the systematic review process to critically appraise literature	Limited based on time	Limited based on time	Narrative and tabular



“Because no up-to-date systematic review on patient values and preferences regarding pharmacologic and nonpharmacologic treatment options for depressive disorders was available, we did a rapid review to meet the time-sensitive needs of guideline developers.”

“We did not search for gray literature, did not dually screen all of the titles and abstracts, and did not dually extract data.”

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Garrity C, Gartlehner G, Nussbaumer-Streit B, King VJ, Hamel C, Kamel C, Affengruber L, Stevens A. Cochrane Rapid Reviews Methods Group offers evidence-informed guidance to conduct rapid reviews. J Clin Epidemiol. 2021 Feb;130:13-22. doi: 10.1016/j.jclinepi.2020.10.007. Epub 2020 Oct 15. PMID: [33068715](https://pubmed.ncbi.nlm.nih.gov/33068715/); PMCID: PMC7557165.

Affengruber L, Wagner G, Dobrescu A, Toromanova A, Chapman A, Persad E, Klerings I, Gartlehner G. Values and Preferences of Patients With Depressive Disorders Regarding Pharmacologic and Nonpharmacologic Treatments : A Rapid Review. Ann Intern Med. 2023 Feb;176(2):217-223. doi: 10.7326/M22-1900. Epub 2023 Jan 24. PMID: [36689749](https://pubmed.ncbi.nlm.nih.gov/36689749/).

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Rapid review	Uses components of the systematic review process to critically appraise literature	Limited based on time	Limited based on time	Narrative and tabular
Realist review	Interpretative review that uses evidence from qualitative and quantitative studies	Systematic and comprehensive	Uses different instruments for quality or risk of bias assessments	Qualitative evidence synthesis; may use conceptual frameworks; mixed methods

Review > J Med Internet Res. 2023 Jan 6;25:e40630. doi: 10.2196/40630.

The Use of Digital Health Interventions for Cardiometabolic Diseases Among South Asian and Black Minority Ethnic Groups: Realist Review



Aumeya Goswami¹, Lydia Poole², Zareen Thorlu-Bangura¹, Nushrat Khan¹, Wasim Hanif³, Kamlesh Khunti⁴, Paramjit Gill⁵, Madiha Sajid⁶, Ann Blandford⁷, Fiona Stevenson⁸, Amitava Banerjee¹, Mel Ramasawmy¹

Realist reviews aim to assess “what works for whom, in what circumstances, in what respects, and how?”

Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info Libr J. 2009 Jun;26(2):91-108. doi: 10.1111/j.1471-1842.2009.00848.x. PMID: [19490148](#).

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Wong G, Greenhalgh T, Westhorp G, Buckingham J, Pawson R. RAMESES publication standards: realist syntheses. BMC Med. 2013 Jan 29;11:21. doi: 10.1186/1741-7015-11-21. PMID: [23360677](#); PMCID: PMC3558331.

Goswami A, Poole L, Thorlu-Bangura Z, Khan N, Hanif W, Khunti K, Gill P, Sajid M, Blandford A, Stevenson F, Banerjee A, Ramasawmy M. The Use of Digital Health Interventions for Cardiometabolic Diseases Among South Asian and Black Minority Ethnic Groups: Realist Review. J Med Internet Res. 2023 Jan 6;25:e40630. doi: 10.2196/40630. PMID: [36607732](#); PMCID: [PMC9862310](#).

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Umbrella review	Review of systematic reviews	Comprehensive; inclusion & exclusion criteria	Required	Extract data from systematic reviews; tables and figures

JAMA Pediatrics | Review

Interventions to Prevent Bronchopulmonary Dysplasia in Preterm Neonates An Umbrella Review of Systematic Reviews and Meta-analyses

Thangaraj Abiramalatha, DM; Viraraghavan Vadakkencherry Ramaswamy, DM; Tapas Bandyopadhyay, DM; Sanjana Hansoge Somanath, DM; Nasreen Banu Shaik, MD; Abdul Kareem Pullattayil, MiST; Gary M. Weiner, MD

Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J.* 2009 Jun;26(2):91-108. doi: 10.1111/j.1471-1842.2009.00848.x. PMID: [19490148](https://pubmed.ncbi.nlm.nih.gov/19490148/).

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Abiramalatha T, Ramaswamy VV, Bandyopadhyay T, Somanath SH, Shaik NB, Pullattayil AK, Weiner GM. Interventions to Prevent Bronchopulmonary Dysplasia in Preterm Neonates: An Umbrella Review of Systematic Reviews and Meta-analyses. *JAMA Pediatr.* 2022 May 1;176(5):502-516. doi: 10.1001/jamapediatrics.2021.6619. PMID: [35226067](https://pubmed.ncbi.nlm.nih.gov/35226067/).

Aromataris E, Fernandez R, Godfrey C, Holly C, Khalil H, Tungpunkom P. Chapter 10: Umbrella Reviews. In: Aromataris E, Munn Z (Editors). *JBIM Manual for Evidence Synthesis*. JBI, 2020. Available from <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-20-11>

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Scoping review	Assess scope of the literature; extent of evidence	Comprehensive; inclusion & exclusion criteria	Not required	Narrative; analytic frameworks; thematic construction

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 Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: Scoping Reviews (2020 version). In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis*, JBI, 2020. Available from <https://synthesismanual.jbi.global>. <https://doi.org/10.46658/JBIMES-20-12>

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the	

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist. [Internet]. Prisma-statement.org. [cited 2023 Oct 5]; Available from: http://www.prisma-statement.org/documents/PRISMA-ScR-Fillable-Checklist_11Sept2019.pdf

Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, Peters MDJ, Horsley T, Weeks L, Hempel S, Akl EA, Chang C, McGowan J, Stewart L, Hartling L, Aldcroft A, Wilson MG, Garritty C, Lewin S, Godfrey CM, Macdonald MT, Langlois EV, Soares-Weiser K, Moriarty J, Clifford T, Tunçalp Ö, Straus SE. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med*. 2018 Oct 2;169(7):467-473. doi: 10.7326/M18-0850. Epub 2018 Sep 4. PMID: [30178033](https://pubmed.ncbi.nlm.nih.gov/30178033/).

Peters MDJ, Godfrey C, Mclnerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: Scoping Reviews (2020 version). In: Aromataris E, Munn Z (Editors). *JBIM Manual for Evidence Synthesis*, JBI, 2020. Available from <https://synthesismanual.jbi.global/> <https://doi.org/10.46658/IBIMES-20-12>

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Critical review	Critical evaluation of the literature; used to generate hypothesis or model	May or may not include comprehensive searching; aims to identify representative articles	Not required	Narrative

Recap

- Describe common literature review types
- Describe methodologies used for different review types



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