

체계적문헌고찰 핵심방법론과 인공지능의 이용

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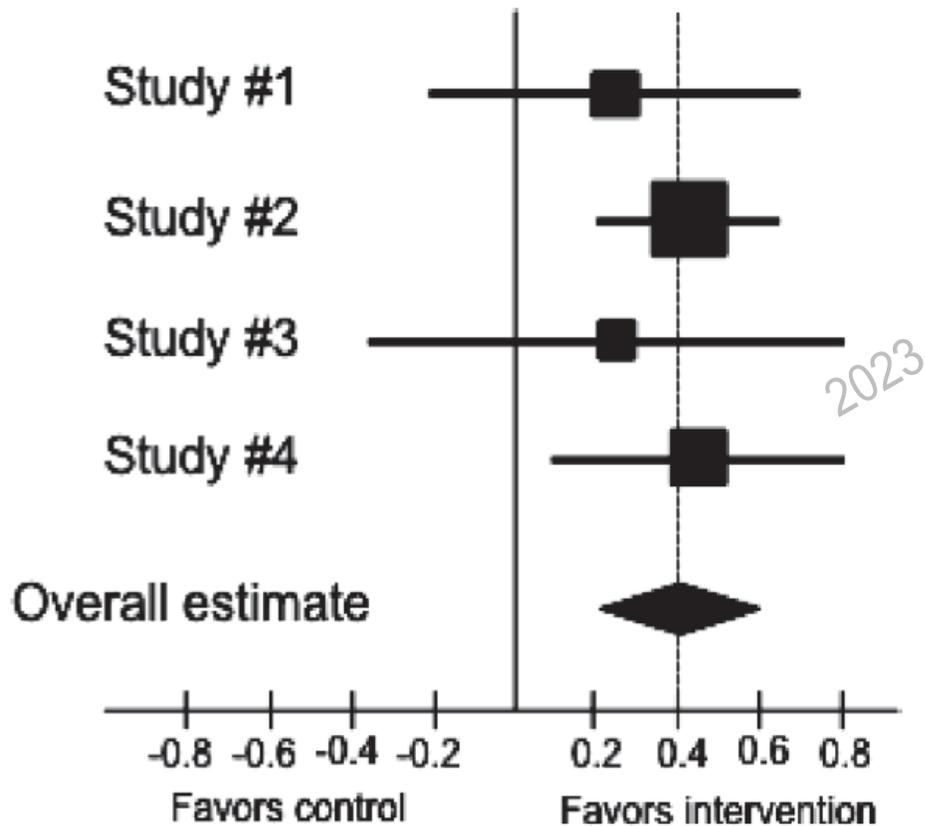
Introduction



Murad MH, et al. Evid Based Med 2016

- Systematic review: summarized results of available carefully designed healthcare studies (controlled trials) and provides a high level of evidence on the effectiveness of healthcare interventions.
- 체계적 문헌고찰

Systematic Review

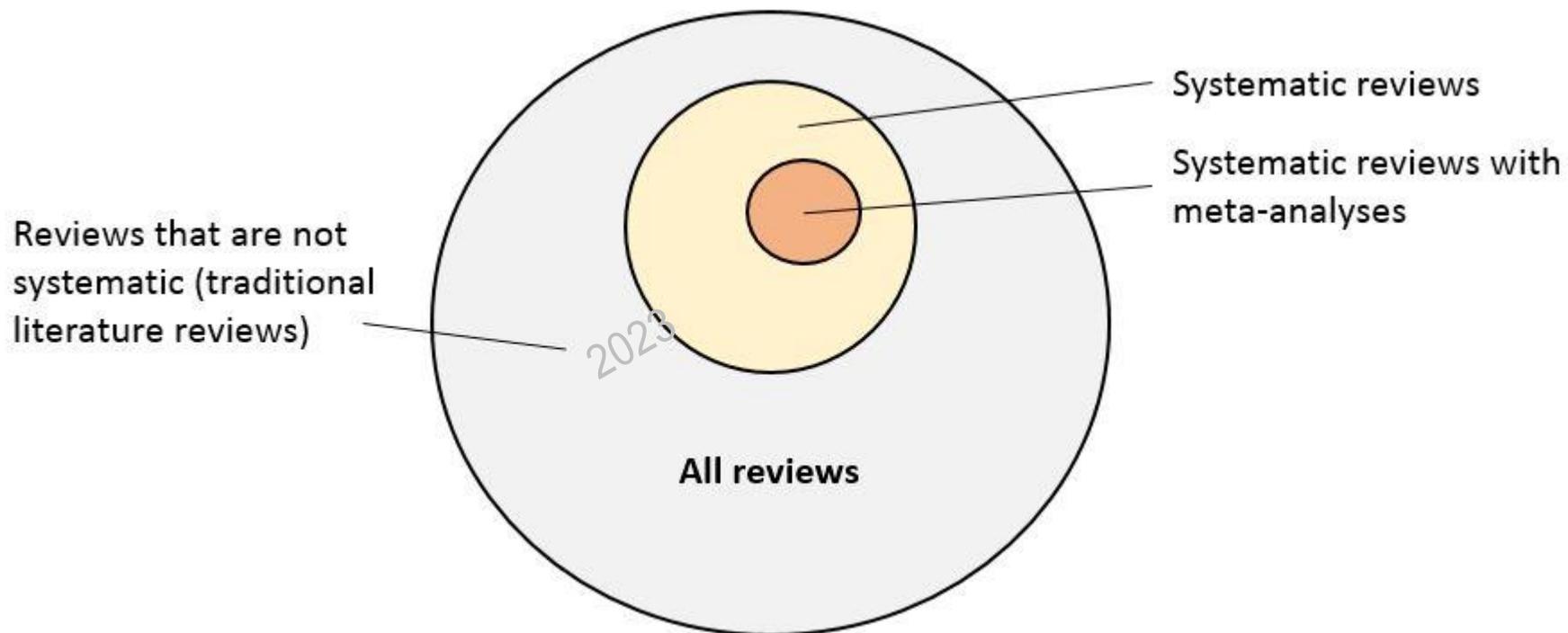


- Gravy train
- Prolific business



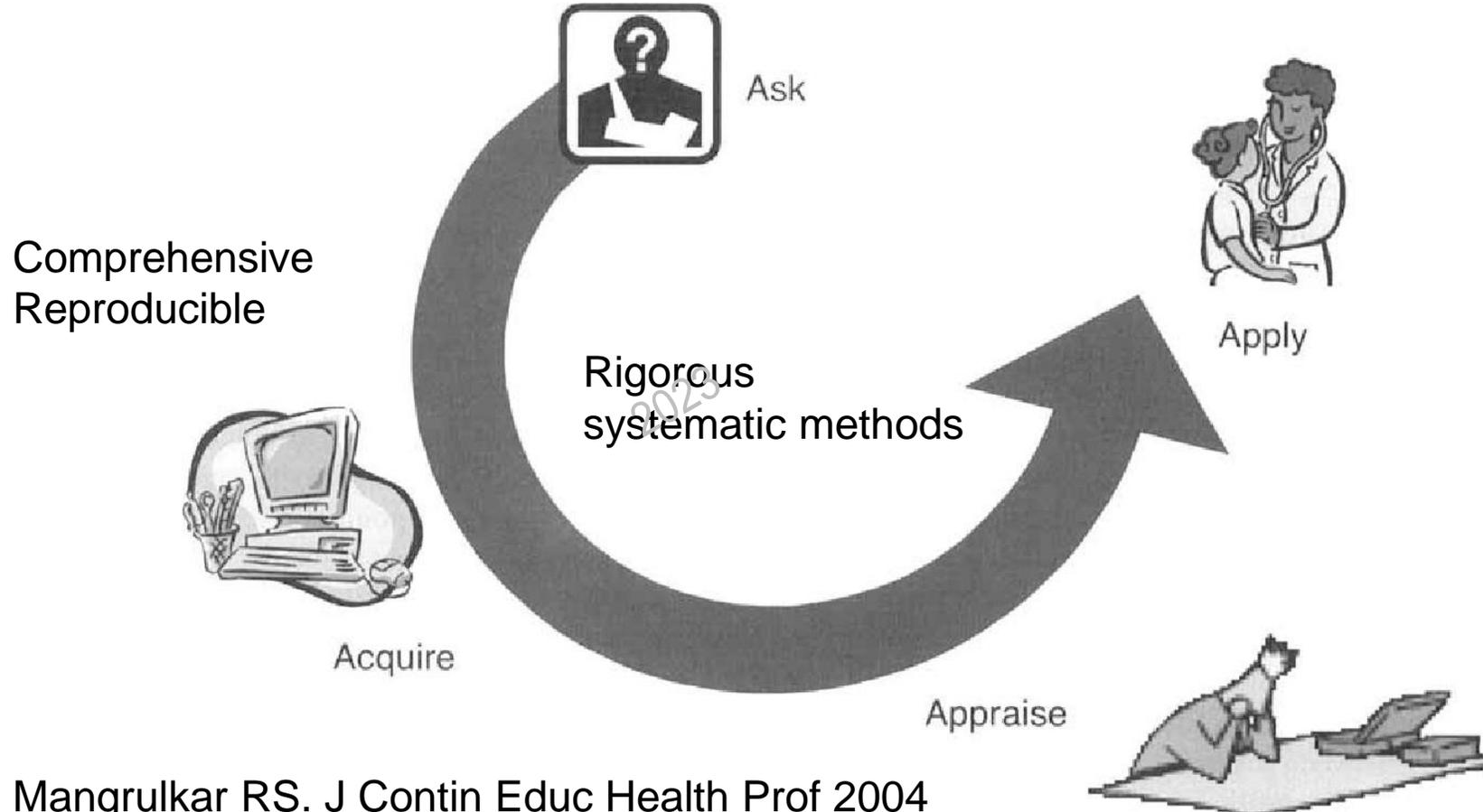
- Career reasons to carry out research

Systematic Review



Available from: <https://libguides.sph.uth.tmc.edu/>

Systematic Review



Mangrulkar RS. J Contin Educ Health Prof 2004

Systematic Review

INVESTIGATIVE AND CLINICAL UROLOGY
ICUROLOGY

icurology.org
Platinum open access journal
Indexed in MEDLINE, SCIE, Scopus, DOAJ and more
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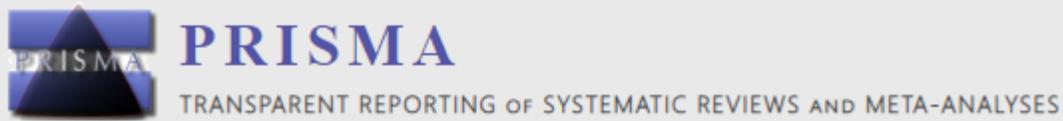
1. Research Ethics

All manuscripts should be prepared in strict observation of the research and publication ethics guidelines recommended by the Council of Science Editors (<http://www.councilscienceeditors.org/>), International Committee of Medical Journal Editors (ICMJE, <http://www.icmje.org/>), World Association of Medical Editors (WAME, <http://www.wame.org/>), and the Korean Association of Medical Journal Editors (KAMJE, https://www.kamje.or.kr/en/main_en). Any study including human subjects or human data must be reviewed and approved by a responsible institutional review board (IRB). Please refer to the principles embodied in the Declaration of Helsinki (2013; <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>) for all investigations involving human materials. Animal experiments also should be reviewed by an appropriate committee for the care and use of animals. Also studies with pathogens requiring a high degree of biosafety should pass review of a relevant committee. The editor of ICUrology may request submission of copies of informed consent from human subjects in clinical studies or IRB approval documents.

A clinical trial defined as "any research project that prospectively assigns human subjects to intervention and comparison groups to study the cause-and-effect relationship between a medical intervention and a health outcome" should be registered to the primary registry prior to publication. ICUrology accepts registration in any of the primary registries that participate in the WHO International Clinical Trials Portal (<http://www.who.int/ictrp/en/>), NIH ClinicalTrials.gov (<http://www.clinicaltrials.gov/>), ISRCTN Register (<http://www.isrctn.com/>), University Hospital Medical Information Network (<http://www.umin.ac.jp/ctr/index/htm/>), or Clinical Research Information Service (<http://cris.nih.go.kr>). The clinical trial registration number shall be published at the end of the abstract. Authors should consult and follow the relevant guidelines for reporting health research data, such as the CONSORT guidelines (<http://www.consort-statement.org/>) for randomized, controlled trials and the PRISMA statement (<http://www.prisma-statement.org/>) for Systematic Reviews and Meta-Analyses.

<https://icurology.org/>

Systematic Review



Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)

Who should use PRISMA?

2023

- Authors: PRISMA aims to help authors improve the reporting of systematic reviews and meta-analyses.
- Journal peer reviewers and editors: PRISMA may also be useful for critical appraisal of published systematic reviews, although it is not a quality assessment instrument to gauge the quality of a systematic review.

Systematic Review

PRISMA checklist 27 Items

Item 24: Registration and protocol

- a: provide registration information for the review, including register name and registration number, or state that the review was not registered
- b: indicate where the review protocol can be accessed, or state that a protocol was not prepared
- c: describe and explain any amendments to information provided at registration or in the protocol

Protocol

NIHR | National Institute
for Health Research

PROSPERO
International prospective register of systematic reviews

[Home](#) | [About PROSPERO](#) | [How to register](#) | [Service information](#)

[Search](#) | [Log in](#) | [Join](#)

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Welcome to PROSPERO
International prospective register of systematic reviews

<https://www.crd.york.ac.uk/prospero/>

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Item 5: Eligibility criteria (specify the inclusion and exclusion criteria)

Pre-specified eligibility criteria

PICOs - intervention

- Population (P)
- Intervention (I)
- Comparator (C)
- Outcome (O)
 1. Meaningful, and not include trivial outcomes
 2. Adverse as well as beneficial outcomes
- Study design (s)

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PICOs – diagnosis

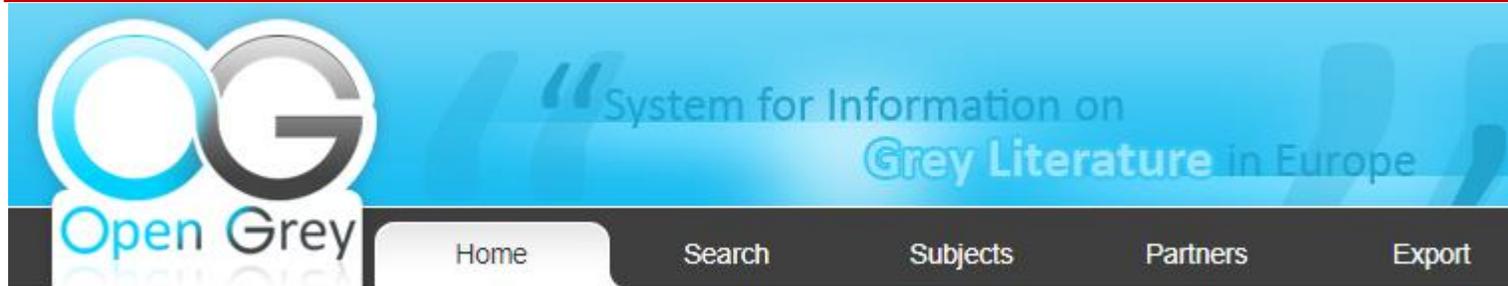
- Population (P)
- Index test (I)
- Comparator test (C)
- Reference test (R)
- Outcome (O)
 1. Sensitivity, specificity
 2. Positive predictive value, negative predictive value
 3. Likelihood ratio

Databases

Item 6: Information sources (Specify all databases and the date when each source was last searched)

- MEDLINE: U.S. National Library of Medicine® (NLM) premier bibliographic database
- EMBASE: biomedical and pharmacological database produced by Elsevier
- Cochrane Library: collection of databases in medicine and other healthcare specialties provided by Cochrane
- Scopus, Web of science, Google
- Regional databases: KoreaMed, LILACS(Latin American & Caribbean Health Sciences Literature)
- Clinical trial registries: ClinicalTrials.gov, WHO International Clinical Trials Registry Platform
- Grey literatures: information produced outside of traditional publishing and distribution channels

Grey Literature



<http://www.opengrey.eu/>

www.greylit.org > Home



<https://www.greylit.org/>

Welcome to the The Grey Literature Report.

The report is a publication produced by the **The New York Academy of Medicine** between 1999 - 2016, alerting readers to new grey literature publications in health services research and selected urban health topics.

Literature Search

- <https://researchrabbitapp.com/home>

The screenshot displays the Research Rabbit app interface, which is organized into several panels:

- Left Panel (Collection Management):** Features a 'Filter' dropdown set to 'Custom' and checkboxes for 'Abstracts' and 'Comments'. Below this is an 'Untitled Collection' containing three papers:
 - Paper 1:** 'Role of Artificial Intelligence Applications in Real-Life Clinical Practice: Systematic Review' by Yin, Ngiam, Ngiam, Teo (2020, 19 pages).
 - Paper 2:** 'Artificial Intelligence Techniques: Analysis, Application, and Outcome in Dentistry-A Systematic Review' by Ahmed, Abbasi, Zuberi, Qamar, Halim, Maqsood, Alam (2021, 7 pages).
 - Paper 3:** 'Artificial intelligence in gynecologic cancers: Current' by Akazawa, Akazawa, Hashimoto (2021, 3 pages).A green '+ Add Papers' button is at the bottom.
- Middle Panel (Actions):** Includes 'Remove from: Untitled Collection', 'Add to Other Collection', and sections for 'EXPLORE PAPERS' (Similar Work: 1398, Earlier Work: 1, Later Work), 'EXPLORE PEOPLE' (These Authors: 15, Suggested Authors: 22), 'EXPLORE OTHER CONTENT' (Linked Content), and 'EXPORT PAPERS' (BibTeX, RIS, CSV).
- Right Panel (Similar Work):** Shows a 'Filter' dropdown set to 'Relevance' and checkboxes for 'Abstracts' and 'Comments'. It lists three similar papers:
 - Wolff ... Baumbach (2020, 49 pages):** 'The Economic Impact of Artificial Intelligence in Health Care: Systematic Review.' (Journal of Medical Internet Research)
 - Jiang ... Wang (2017, 1149 pages):** 'Artificial intelligence in healthcare: past, present and future'
 - Greenhalgh ... Shaw (2017, 752 pages):** 'Beyond Adoption: A New Framework for Theorizing and Evaluating Nonadoption, Abandonment, and Challenges to the Scale-Up, Spread, and Sustainability of Health and Care Technologies' (Journal of Medical Internet Research)
- Far Right Panel (Network Graph):** Titled 'Connections between your collection and 50 papers', it shows a network graph with nodes representing authors and papers. Nodes are labeled with author names and years (e.g., Wolff 2020, Yin 2020, Kelly 2019, Topol 2019, Londoni 2019, Jiang 2017, Wang 2017, Greenhalgh 2017, Shaw 2017, Lee 2016, Ahmed 2021, Hung 2019, Akazawa 2021). The graph can be filtered by 'First Author' or 'Last Author'.

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Item 7: Search strategy (present the full search strategies for all databases)

Search strategy

MEDLINE (from 1966 to November 2011), EMBASE (from 1974 to November 2011), the Cochrane Controlled Trail Register of Controlled Trials, and the reference lists of retrieved studies were searched to identify RCTs that referred to the effects of silodosin treatment. The following search terms were used: silodosin, BPH, and randomized controlled trials.

Cui Y, et al. Int Urol Nephrol 2012

Systematic Review

Item 7: Search strategy (present the full search strategies for all databases)

APPENDICES

Appendix I. Search strategies

Cochrane Library (via Wiley) search strategy

1. "Prostatic Hyperplasia" [Mesh]
2. (hyperplasia NEAR/3 prostat*):ti,ab,kw
3. "hyperplasia of the prostate":ti,ab,kw
4. "prostatic hyperplasia":ab,ti
5. (hypertrophy NEAR/3 prostat*):ti,ab,kw
6. (adenoma* NEAR/3 prostat*):ti,ab,kw
7. "lower urinary tract symptom" [Mesh]
8. "lower urinary tract": ti,ab,kw
9. LUTS: ti,ab,kw
10. "prostatism": ti,ab,kw
11. "prostatism"[Mesh]
12. "Urinary Bladder Neck Obstruction" [Mesh]
13. "bladder outlet obstruction": ti,ab,kw
14. (prostat* NEAR/3 enlarg*): ti,ab,kw
15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14
16. silodosin: ti,ab,kw
17. "KMD-3213": ti,ab,kw
18. 16 or 17

MEDLINE (via Pubmed) search strategy

Structure of a search strategy

1. Terms to search for the **health condition** of interest, i.e. the population
2. Terms to search for the **intervention(s)** evaluated
3. Terms to search for the types of **study design**

Search Strategy: MeSH

Type or paste in up to 20 PMIDs ...

Subheadings: Full
 Two-Letter Code
 None

Article Titles: Full
 Truncated
 None

Journal Titles: Full
 Abbreviated
 None

Show: Abstracts
 Author Keywords
 Field Names
 Major Topic Indicators

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<https://mesh.med.yale.edu/>

Search Strategy

PMID	28935701	33782057
Title	AMSTAR 2: a critical appraisal tool for systematic reviews that...	The PRISMA 2020 statement: an updated guideline for reporting s...
Author (Year)	Shea BJ (2017)	Page MJ (2021)
MeSH Headings	Clinical Studies as Topic	
	Evidence-Based Medicine*	
		Humans
	Meta-Analysis as Topic	Medical Writing / standards Meta-Analysis as Topic
	Observational Studies as Topic Observer Variation	
		Practice Guidelines as Topic
		Quality Control
	Randomized Controlled Trials as Topic Review Literature as Topic*	Research Design / standards*
		Statistics as Topic Systematic Reviews as Topic* / methods Systematic Reviews as Topic* / standards
		Terminology as Topic
Author Keywords		

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Item 8: Selection process (specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked **independently**)

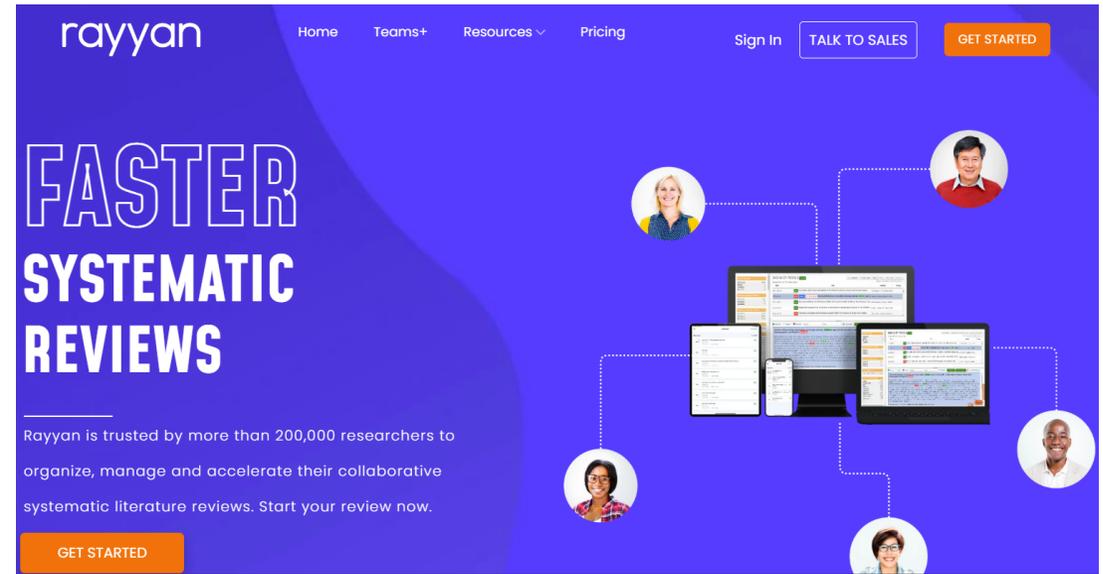
Item 9: Data collection process (specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked **independently**, any processes for **obtaining or confirming data from study investigators**)

Selection Process

- <https://www.covidence.org/>



- <https://www.rayyan.ai/>



Systematic Review

Systematic Review Progress Dashboard

- Import references: 804 total duplicates removed. [Import](#)
- Title and abstract screening: 7603 irrelevant, 0 studies to screen.
- Full text review: 421 excluded, 2 studies to screen.

TEAM PROGRESS

2023

655 ● DONE 0 ● CONFLICTS
0 ● ONE VOTE 2 ● NO VOTES

[Team settings](#)

JAE, YOU CAN STILL SCREEN

2

[Continue](#)

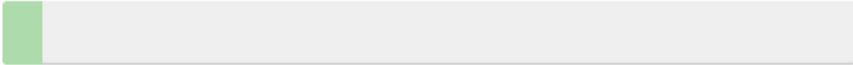
You've screened 167 studies so far

Systematic Review

^ Extraction

[0 extracted](#) [42 studies to extract](#)

TEAM PROGRESS



0 ● DONE 0 ● CONSENSUS
2 ● STARTED 40 ● NO VOTES

[Team settings](#)

**JAE,
YOU CAN STILL
EXTRACT
42**

[Continue](#)

 You've extracted 0 studies so far

Systematic Review

Item 11: Study risk of bias assessment (specify the **methods** used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked **independently**)

Item 18: Risk of bias in studies (present assessments of risk of bias for each included study)

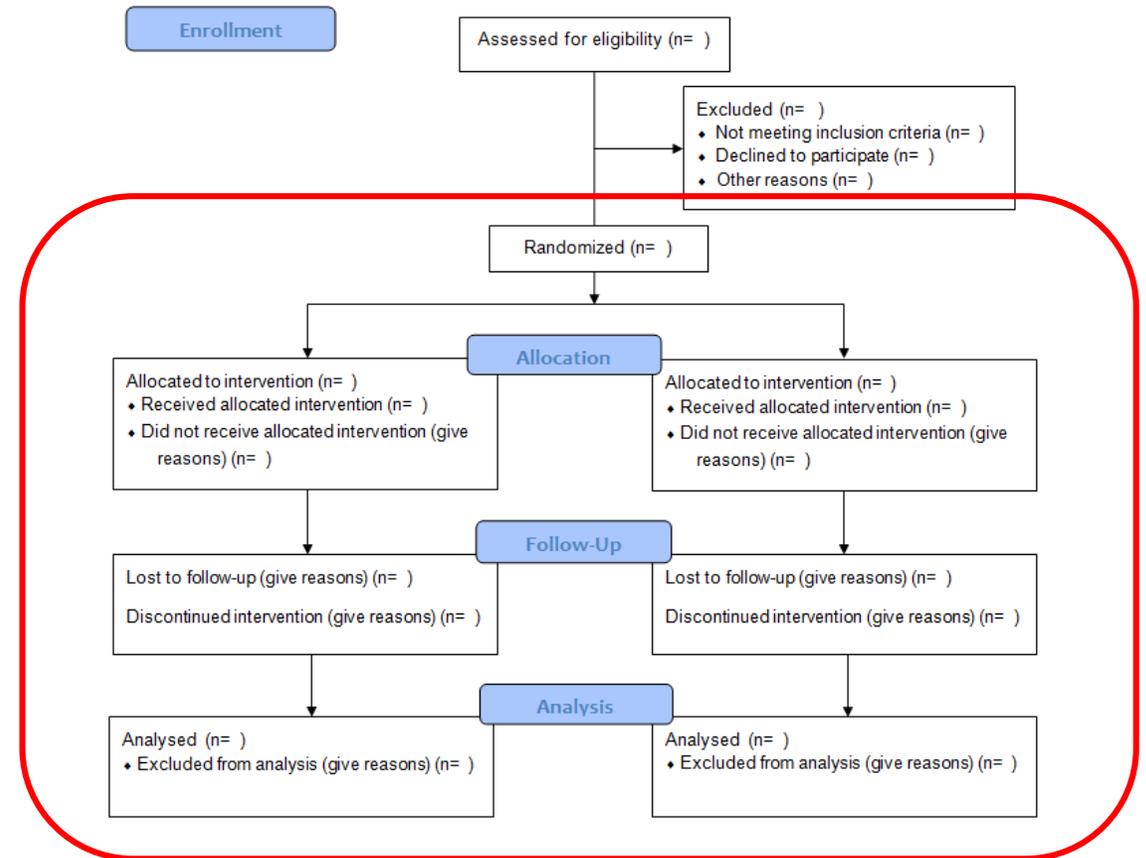
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Risk of Bias

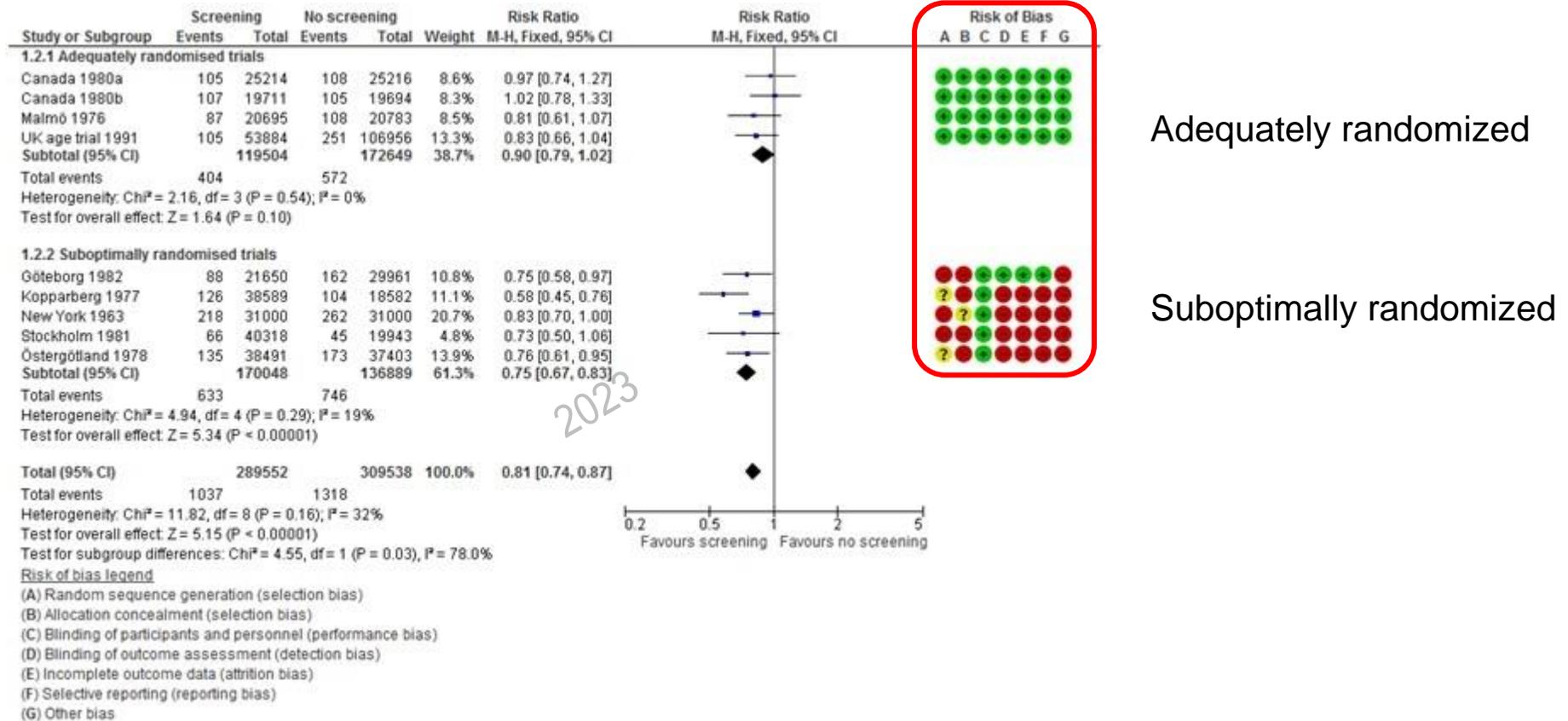
- Sequence generation
- Allocation concealment
- Blinding of participants and personnel
- Blinding of outcome assessment
- Incomplete outcome data
- Selective outcome reporting
- Other bias

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CONSORT 2010 Flow Diagram



Risk of Bias



Cochrane Handbook for Systematic Reviews of Interventions

Risk of Bias

- <https://www.robotreviewer.net/>

About RobotReviewer

What is RobotReviewer?

RobotReviewer is a machine learning system aiming which aims to support evidence synthesis.

Our demonstration website allows users to upload RCT articles and see automatically determined information concerning the trial conduct (the 'PICO', study design, and whether there is a risk of bias).

Marshall IJ, et al. Proc Conf Assoc Comput Linguist Meet 2017.

Risk of Bias

RobotReviewer report

Abstract

Here are the results from 6 PDFs.

Risk of bias table

trial	design	Random sequence generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment
Srinivasan V, 2015	RCT	+	+	+	+
Djumezei RN, 2013	RCT	+	+	?	+
U P, 2010	RCT	?	?	?	?

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Support for judgement

1. Randomization and blinding Participants are randomized via a computer number generator using sequentially numbered opaque sealed envelopes in a 1:1 allocation ratio to either TBC or UC group, using permuted blocks.

RobotReviewer

UPLOAD / REPORT / DOCUMENT

summary report including all measurement scores of MPOB 8, and any recommendations to change treatment) by fax to the nurse. The physician has access to this report.

No evaluation change is allowed during the first 6 months of follow-up. If 80% is uncontrolled (14/8/90 control) at the 6, 12 and 18 week visits, with the consistently placement of the nurse a center by phone or face to face with the physician is made by the nurse. Using records of the nurse and consistency pharmacist recommendations on lifestyle, medication adherence, and therapy, the physician adapts the treatment if necessary.

Blinding of participants and personnel

Patients in the UC group received routine care by their usual physician without name or consistency pharmacist intervention.

Blinding of outcome assessment

At each visit, BP is measured in TBC patients by the nurse and the consistency pharmacist using the already validated Microlife WatchBP home monitoring device (M) using a standardized protocol. At the end of the 6-month follow-up, ABPM is performed using TBC and UC patients using the already validated electronic Datascope (DASH) device (Narrow SA, Fast-Multisession Standard) (M). The ABPM device is installed on the dominant arm by the nurse who explains the procedure to the patient. Measurements are based on the auscultatory mode, relayed by the medication mode in case of failure of the auscultatory mode. Measurements are made every 20-min intervals during the day and every 60-min intervals during the night (M). The mean daytime ABPM is calculated from the average of 37 readings obtained between 9:30 am to 9:30 pm.

Outcomes

The primary outcomes are 1) the difference in mean device ABPM at 6 months between TBC and UC patients and 2) the difference in the proportion of

(M), a difference in systolic BP of 6 to 14 mmHg is expected between TBC and UC case groups at the end of 6 months of follow-up. A total of 80 patients per group provides 80% power to detect a 4 mmHg difference in systolic BP (6 to 14 mmHg) at 6 months of follow-up with a two-sided alpha of 0.05. Assuming a drop out or loss to follow up rate of ~10%, the sample size is adjusted to 88 per group, for a total sample size of 176.

Randomization and blinding

Participants are randomized via a computer number generator using sequentially numbered opaque sealed envelopes in a 1:1 allocation ratio to either TBC or UC group, using permuted blocks. The block sizes will not be disclosed, to ensure concealment of allocation. Assignments were made in advance by a statistician who has prepared the sequentially numbered opaque sealed envelopes that contain the randomization assignment. Separate lists of randomization are prepared for each clinic. Numbered envelopes are opened after obtaining each patient's consent.

Study investigators, co-investigator and collaborators are not involved in the randomization sequence. Due to the nature of the intervention, patients and healthcare professionals (physicians, nurses and consistency pharmacists) cannot be blinded to the intervention.

Statistical analysis

All analyses will be conducted following the intention-to-treat principle. The medication will be blinded to group allocation, baseline characteristics of the TBC and UC groups will be assessed via descriptive analyses in terms of age, gender, co-morbidities, smoking status, body mass index, BP and perceived medication. Baseline characteristics of nurses, pharmacists and physicians will be also described, such as age, sex, year of graduation, and pharmacist status (pharmacy owner, salaried employee). Mean (standard deviation) and proportions will be compared for continuous and categorical variables, respectively.

Risk of Bias

- Random Sequence Generation 0
- Overall risk of bias prediction: low
- Randomization and blinding Participants and Personnel 0
- Assignments were made in advance by a statistician 0
- Study investigators, co-investigators and collaborators 0
- Allocation Concealment 0
- Blinding Of Participants And Personnel 0
- Blinding Of Outcome Assessment 0

Systematic Review

Item 16: Study selection

- a: describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally **using a flow diagram**
- b: cite studies that might appear to meet the inclusion criteria, but which were excluded, and **explain why they were excluded**

Supplementary Table 1 Excluded studies with reasons

Reference	Reason for exclusion
Paton , et al. (2013)[53]	Wrong publication type – letter
Williams (2011)[54]	Wrong publication type – not a journal article
Dietrich, et al. (2017)[55]	Wrong study design – no experience-gathering, only design.
Truman and Raine (2002)[56]	Wrong study design – no design, only experience gathering.
Vechakul, et al. (2015)[57]	Wrong study design – experiences of the design team only
Outlaw, et al. (2018)[58]	Wrong population – no design , only experiences gathered
Palmer, et al. (2018)[59]	Wrong publication type – description of a model, not a study
Palmer, et al. (2015)[60]	Wrong publication type – protocol only
Harrington, et al. (2018)[61]	Wrong population – only service-users involved (no co-design), conference paper
Davies, et al. (2016)[62]	Wrong publication type – no health service design
Richard, et al. (2017)[29]	Wrong publication type – protocol only



PRISMA 2009 Flow Diagram

Flow Diagram

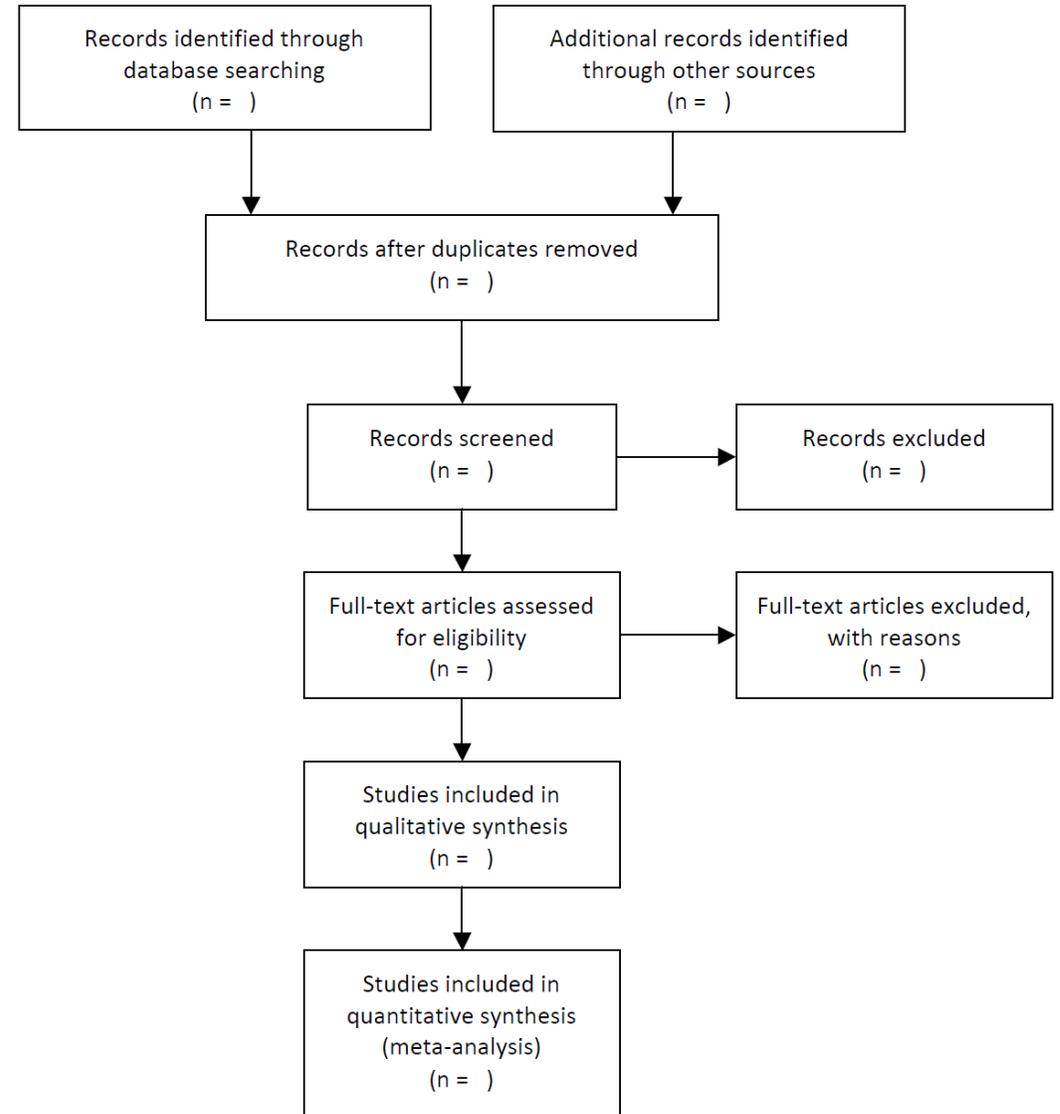
Identification

Screening

Eligibility

Included

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Flow Diagram

Main options

Previous studies
Not included (dropdown) Included (dropdown)

Other searches for studies
Included (dropdown)

Individual databases
Not included (dropdown)

Individual registers
Not Included (dropdown)

Click to reset

Identification

Databases 0

Registers 0

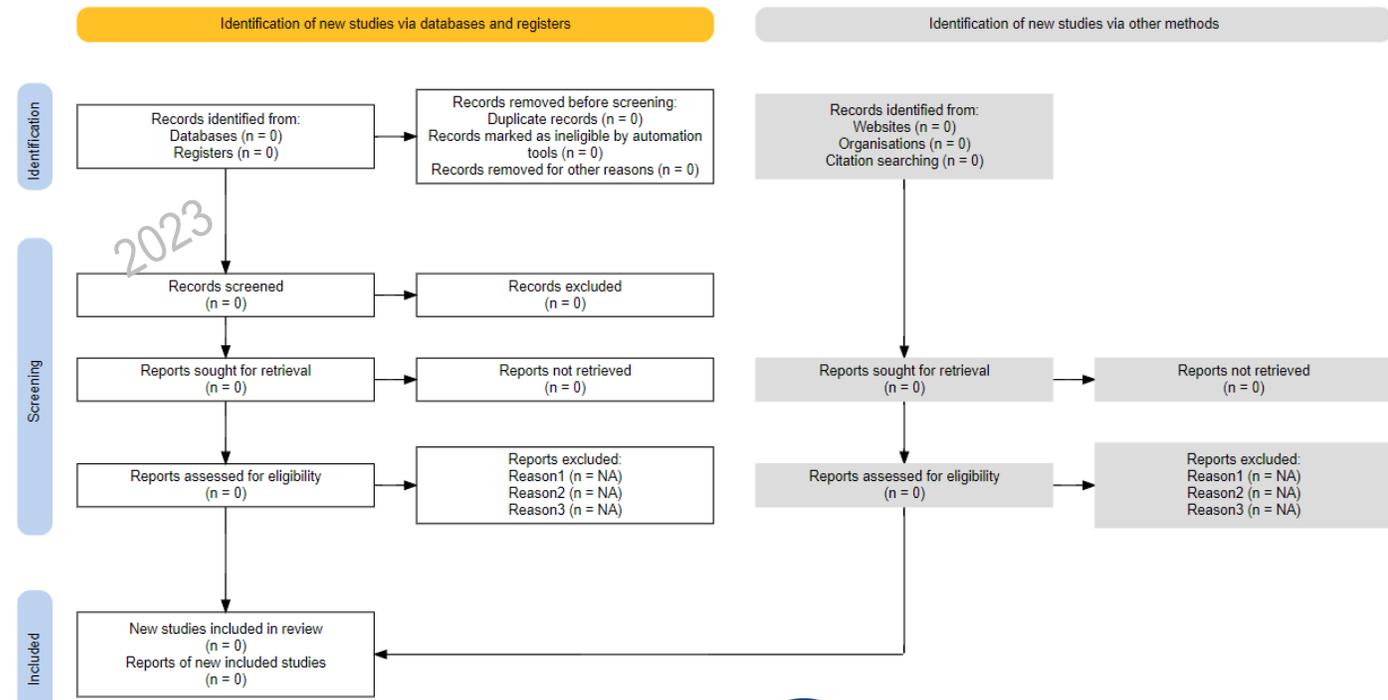
Websites 0

Organisations 0

Citations 0

Support Us

https://estech.shinyapps.io/prisma_flowdiagram/



Systematic Review

Item 20: Results of Syntheses

- b: If meta-analysis was done, present for each the summary estimate and its precision (e.g. **confidence interval**) and measures of **statistical heterogeneity**
- c: present results of all investigations of possible **causes of heterogeneity** among study results (subgroup analysis)
- d: present results of all **sensitivity analyses** conducted to assess the robustness of the synthesized results

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*c,d: should be prespecified.

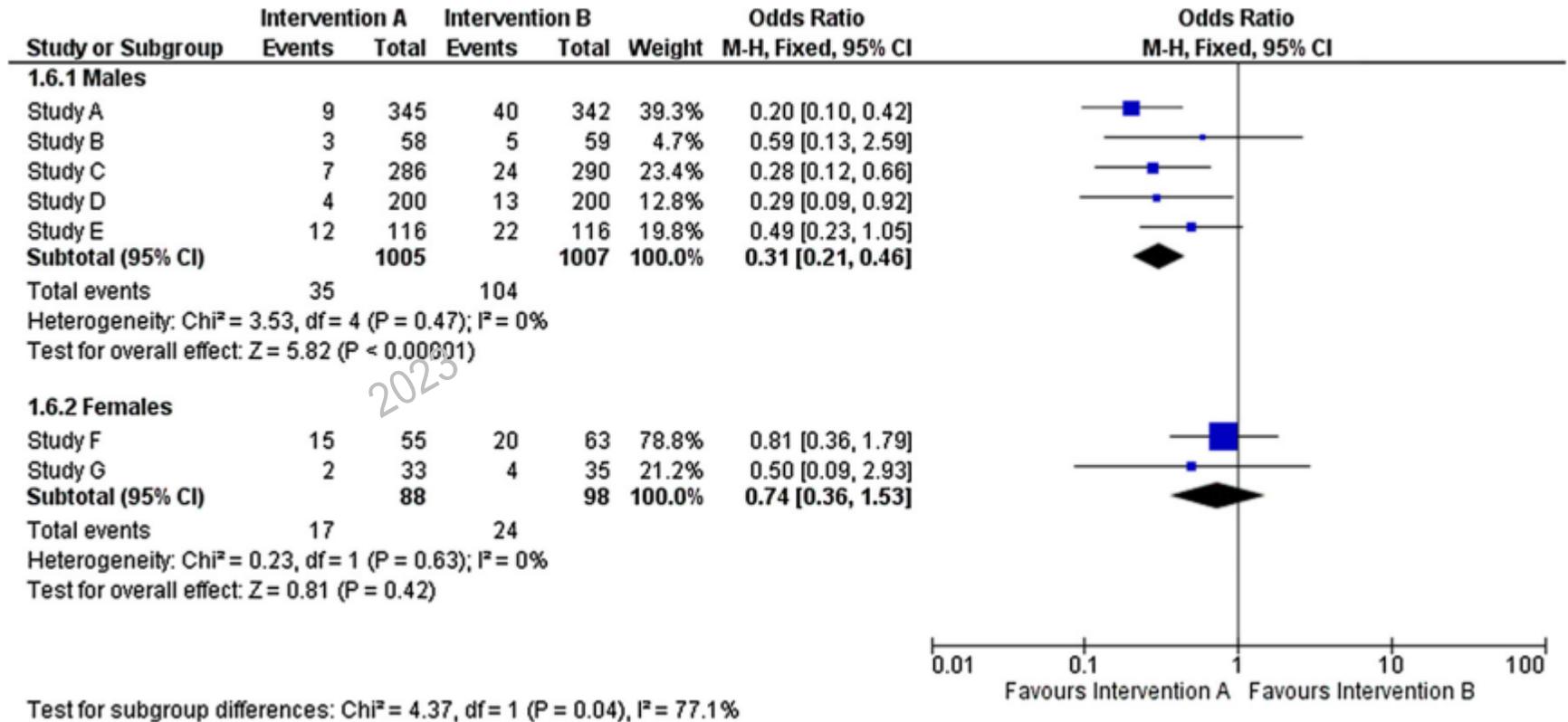
Systematic Review

Subgroup analysis

Investigations of possible causes of heterogeneity

Male

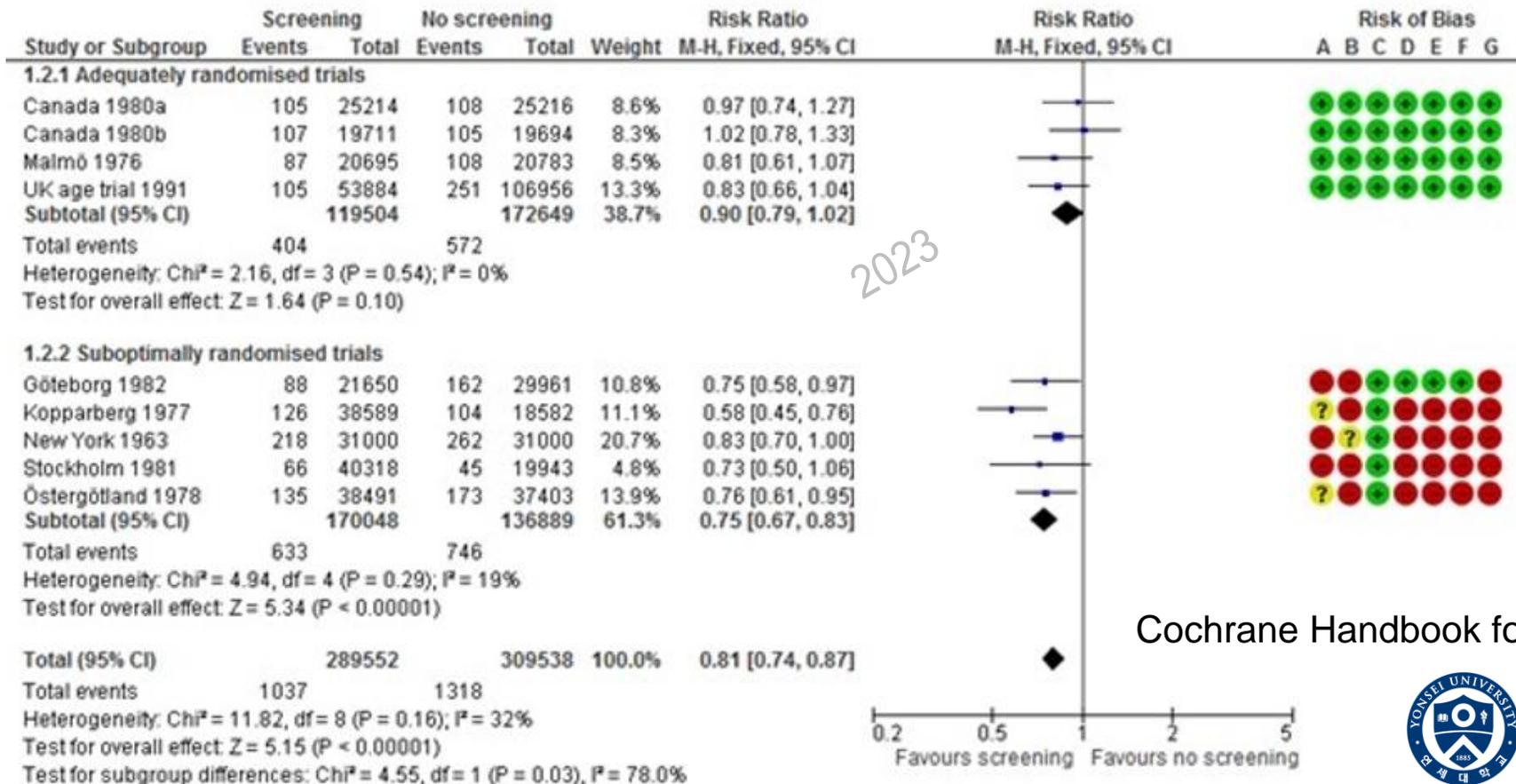
Female



Richardson M, et al. Clin Epidemiol Glob Health 2018

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Sensitivity analysis: method to determine the robustness of an assessment by examining the extent to which results are affected by changes in methods, models, values of unmeasured variables, or assumptions



Cochrane Handbook for Systematic Reviews of Interventions



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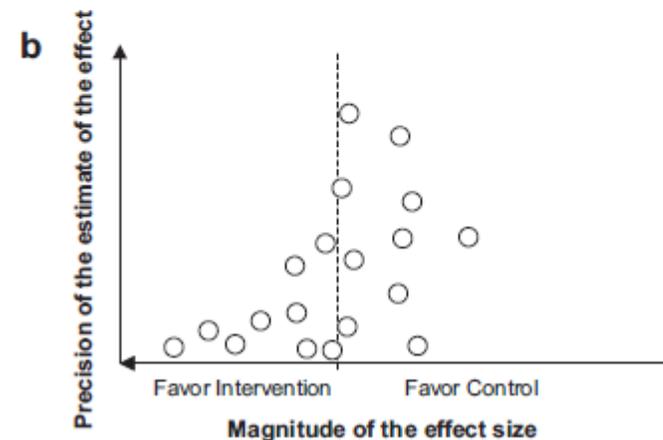
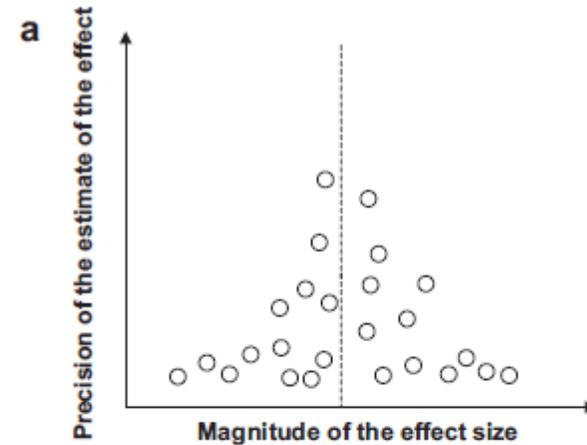
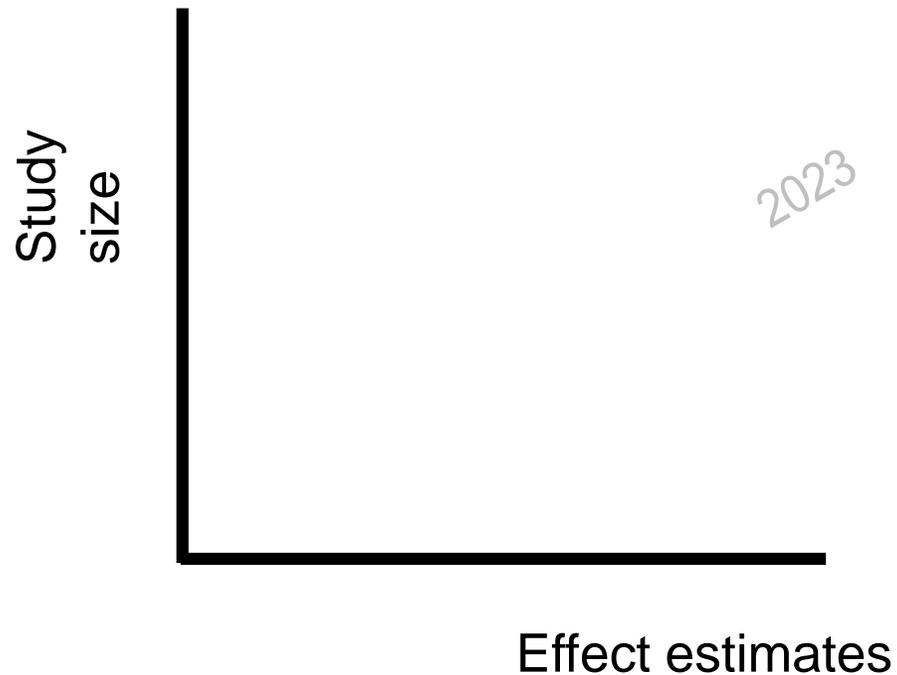
Item 14: Reporting bias assessment (describe any methods used to assess risk of bias due to missing results in a synthesis)

Item 21: Reporting biases (present assessments of risk of bias due to missing results [arising from reporting biases] for each synthesis assessed)

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Funnel Plot

- Funnel plot: precision of the estimated intervention effect increases as the size of the study increases.
- Visual interpretation



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Item 15: Certainty assessment (describe any methods used to assess certainty in the body of evidence for an outcome)

Item 22: Certainty of evidence (present assessments of certainty in the body of evidence for each outcome assessed)

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GRADE Certainty of Evidence

Table: GRADE's approach to rating quality of evidence (aka certainty in effect estimates)

For each outcome based on a systematic review and across outcomes (lowest quality across the outcomes critical for decision making)

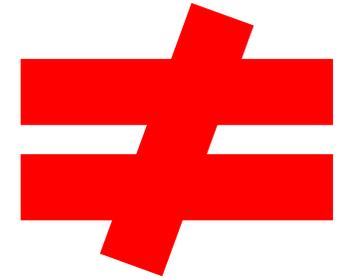
1. Establish initial level of certainty		2. Consider lowering or raising level of certainty		3. Final level of certainty rating
Study design	Initial certainty in an estimate of effect	Reasons for considering lowering or raising certainty		Certainty in an estimate of effect across those considerations
		↓ Lower if	↑ Higher if*	
Randomized trials →	High certainty	Risk of Bias Inconsistency Indirectness Imprecision Publication bias	Large effect Dose response All plausible confounding & bias □ would reduce a demonstrated effect or □ would suggest a spurious effect if no effect was observed	High ⊕⊕⊕⊕
				Moderate ⊕⊕⊕□
Observational studies →	Low certainty			Low ⊕⊕□□
				Very low ⊕□□□

*upgrading criteria are usually applicable to observational studies only.

GRADE: Certainty of Evidence

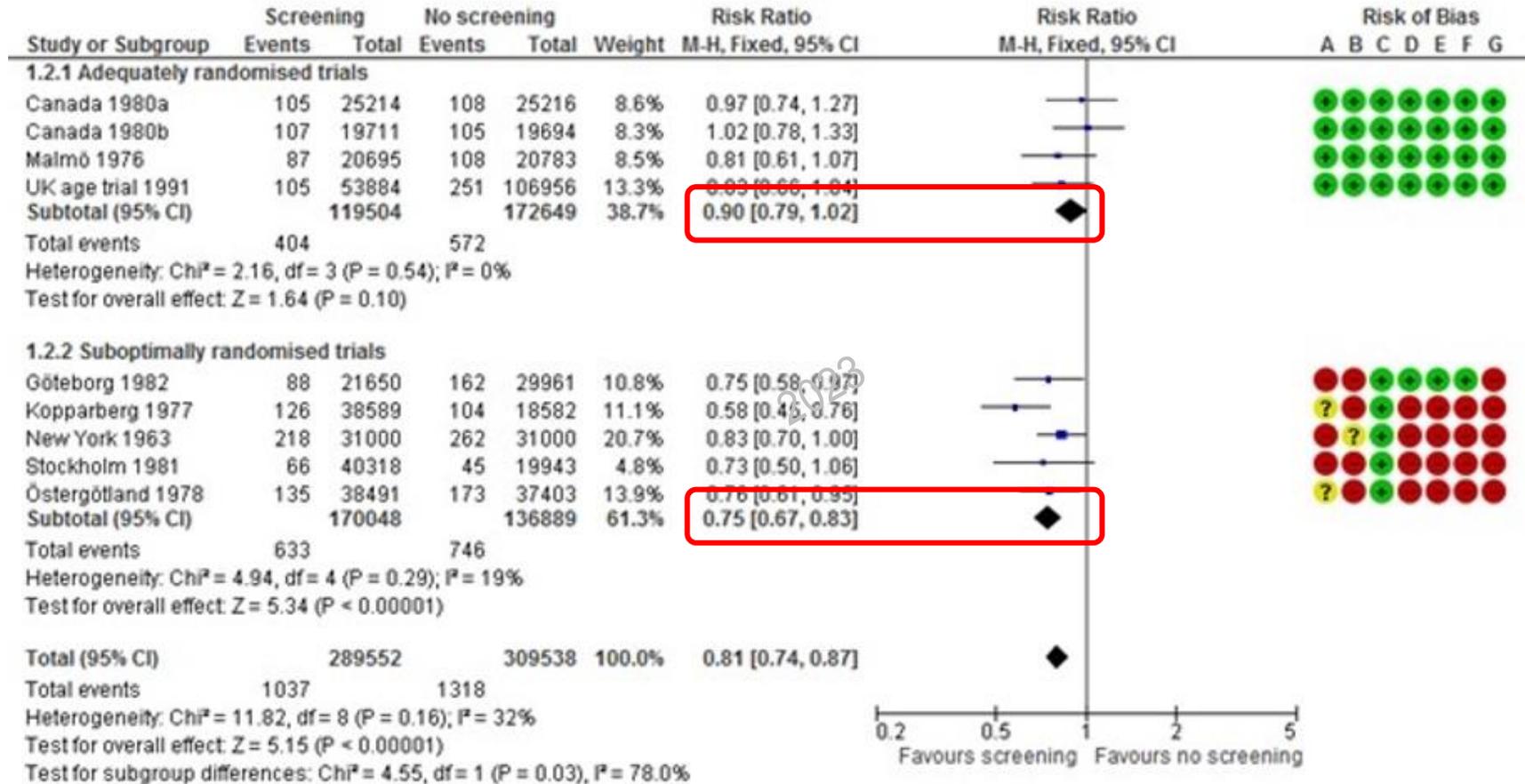
Certainty level	Definition
High	We are very confident that the true effect lies close to that of the estimate of the effect
Moderate	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low	We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

$P < 0.05$



High certainty of evidence

GRADE Certainty of Evidence



P > 0.05

P < 0.05

GRADE Certainty of Evidence

GRADEpro | GDT

product extensions EtD's and Guidelines resources pricing contact [log in](#)

Join our AI in Evidence-Based Healthcare group!

We invite everybody who would like to discuss how AI can expedite evidence production, synthesis, implementation, and evaluation to join!

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<https://www.gradepro.org/>

GRADE your evidence and improve
your guideline development in
health care

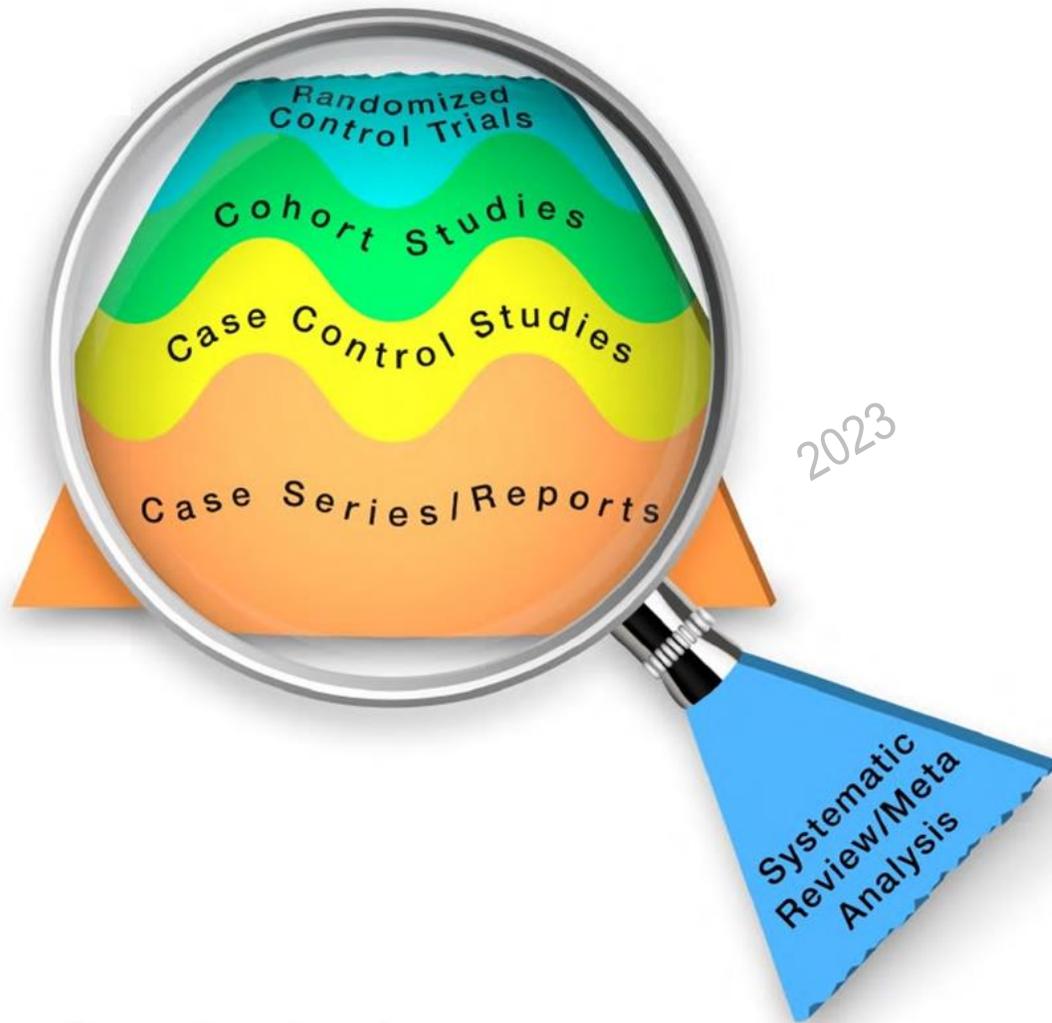
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View on Twitter

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Select **stages of the review** you want support with:

Any

OR

Protocol development

Search

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Data extraction

Quality assessment

Synthesis

Report

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<http://systematicreviewtools.com/index.php>

Review family: "any" | Review stages: "Protocol" | 12 tools have been found.

Name	Summary
A multicomponent decision tool for prioritising the updating of systematic reviews	In the absence of a consensus on appropriate methods for deciding when to update systematic reviews, a decision tool was developed to replace an approach based on an arbitrary and rigid time period with a priority based approach. The tool broadly consists of three criteria: clinical question answered or no longer relevant, new relevant factors to consider, and availability of new studies. The decision tool can help identify reviews most sensitive to change and thus minimise unnecessary updating and waste of resources
Campbell evidence gap map guidance	This guidance, produced by the Campbell Collaboration, is intended to help commissioners and producers of evidence gap maps (EGMs) through the process. It explains the process of undertaking an EGM for both Campbell and for other research, including 10 tips and a guide to the different steps of producing an EGM.
COSMOS-E	Conducting Systematic Reviews and Meta-Analyses of Observational Studies of Etiology (COSMOS-E) provides guidance on all steps in systematic reviews of observational studies of etiology, from shaping the research question, defining exposure and outcomes, to assessing the risk of bias and statistical analysis.
Guidelines for Performing Systematic Literature Reviews in Software Engineering	A comprehensive document which presents general guidelines for undertaking systematic reviews in software engineering.
How to Read Articles That Use Machine Learning	Part of the Users? Guides to the Medical Literature, this article offers guidance of how to evaluate articles on machine learning-based tools, such as clinical diagnostic tools.
PerSPEctiF	PerSPEctiF (Perspective, Setting, Phenomenon of interest/problem, Environment, optional Comparison, Time/timing and Findings) is a question framework similar to PICO and SPICE, but designed specifically for exploring complex interventions within qualitative evidence synthesis.



Reference

1. Shea BJ, Reeves BC, Wells G, et al. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *BMJ* 2017;358:j4008.
2. Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71.

한국 GRADE 네트워크 워크숍

2021 연세대학교 근거중심의학 온·오프라인 통합 워크숍

On·Offline Workshop

GRADE: Clinical Guideline Development Workshop
연세대학교 미래융합연구원 근거중심의학 연구센터/한국 GRADE 네트워크

일시 2021.11.12.(금) / 13:30~17:00

장소 연세대학교 원주외과대학 대학원강의실
(온라인 참석의 경우 등록자에 한해 개별공지 예정)

GRADE(Grading of Recommendations Assessment, Development and Evaluation)는 체계적 문헌고찰 및 임상진료지침의 근거의 질이나 권고의 수준을 평가하는 방법론을 의미합니다.



Program	시간	내용	강연자
Registration	13:30-13:50		
Welcome	13:50-14:00	백순규 (연주연세의료원장) 정준희 (연주외과대학장)	
Introduction to GRADE	14:00-14:20	Philipp Dahm (University of Minnesota)	
PICO and patient important outcomes	14:20-14:40	황의창 (연남대학교 비뇨의학교실)	
Rating down - risk of bias	14:40-15:10	정재홍 (연주외과대학 비뇨의학교실)	
Break time	15:10-15:30		
Rating down - other domains	15:30-16:00	황의창 (연남대학교 비뇨의학교실)	
Rating up	16:00-16:20	한미아 (조선대학교 해상외과학교실)	
From evidence to recommendation	16:20-16:40	정재홍 (연주외과대학 비뇨의학교실)	
ADJOURN: Q and A	16:40-17:00		

참가접수 및 문의: 근거중심의학 연구센터/ cochrane@yonsei.ac.kr

2022 연세대학교 근거중심의학 워크숍

GRADE 방법론을 이용한 체계적 문헌고찰 워크숍

GRADE (Grading of Recommendations, Assessment, Development and Evaluations)는 체계적 문헌고찰이나 임상진료지침에서 근거수준 및 권고강도를 평가하는 방법론을 의미합니다.

2022년 10월 21일 (금, 토)
8:30 ~ 17:00

연세대학교 원주세브란스기독병원 7층 외래센터 대회의실

사전등록
한국 GRADE 네트워크 홈페이지
<https://koreagradenetwork.modoo.at>

등록비
(교재, 중식, 주차권)일당 20만원 / 학생 14만원

문의
연세대학교 미래융합연구원 근거중심의학 연구센터
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주관
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연세대학교 미래융합연구원 근거중심의학 연구센터

주최
연세대학교 원주외과대학
연세대학교 미래융합연구원 근거중심의학 연구센터
조선대학교 양곡연구원 근거중심의학연구소

코프넷 배너의학 한지부 한국 GRADE 네트워크

Scientific Program : 1일자

08:30 - 08:50	Registration
08:50 - 09:00	Welcome address 백순규(연주연세의료원장) 정준희(연세대학교 원주외과대학장)
09:00 - 09:50	Introduction to systematic review and GRADE 한미아(조선대학교 의과대학)
10:00 - 10:50	PICO and patient important outcome 황의창(연남대학교 의과대학)
11:00 - 11:50	Literature search 김영희(연세대학교 원주외과대학)
12:00 - 13:00	Lunch
13:00 - 13:50	Risk of bias assessment : randomized controlled trials 정재홍(연세대학교 원주외과대학)
14:00 - 14:50	Risk of bias assessment : non randomized studies 정재홍(연세대학교 원주외과대학)
15:00 - 15:50	Risk of bias assessment : practice 정재홍(연세대학교 원주외과대학)
16:00 - 16:50	Rating down : risk of bias 정재홍(연세대학교 원주외과대학)
16:50 - 17:00	Q and A

Scientific Program : 2일자

08:30 - 09:00	Registration
09:00 - 09:50	Meta-analysis 이현주(연세대학교 보건대학원)
10:00 - 10:50	Heterogeneity, subgroup and sensitivity analyses 이현주(연세대학교 보건대학원)
11:00 - 11:50	Introduction to RevMan 황의창(연남대학교 의과대학)
12:00 - 13:00	Lunch
13:00 - 13:50	Rating down : inconsistency, indirectness, imprecision, publication bias 황의창(연남대학교 의과대학)
14:00 - 14:50	Rating up 황의창(연남대학교 의과대학)
15:00 - 15:50	Certainty of evidence 한미아(조선대학교 의과대학)
16:00 - 16:50	Summary of finding tables 한미아(조선대학교 의과대학)
16:50 - 17:00	Q and A

2023년 GRADE를 이용한 근거수준 평가 방법론 워크숍

GRADE(Grading of Recommendations Assessment, Development and Evaluation)는 체계적 문헌고찰이나 임상진료지침 개발 등 근거의 질이나 권고의 수준을 평가하는 방법론을 의미합니다.

일시 2023년 5월 20일(토) 9:00~17:00

장소 조선대학교 의과대학 2호관 5층 5203호실

Scientific program

시간	내용	연진
09:00-09:10	Welcome address	한미아 (조선대학교 의과대학)
09:10-09:50	Introduction to GRADE approach	황의창 (조선대학교 의과대학)
10:00-10:40	PICO and patient-important outcomes	김성중 (조선대학교 의과대학)
10:50-11:50	Rating down-risk of bias	한미아 (조선대학교 의과대학)
12:00-13:00	Lunch	
13:00-13:50	Rating down-inconsistency	김광민 (연세대학교 원주외과대학)
14:00-14:50	Rating down-indirectness, imprecision	황의창 (연남대학교 의과대학)
15:00-15:50	Publication bias, rating up	이현주 (연세대학교 원주외과대학)
16:00-16:50	From evidence to recommendation	정재홍 (연세대학교 원주외과대학)
16:50-17:00	Q&A	

사전등록 한국GRADE네트워크홈페이지 (<https://koreagradenetwork.modoo.at/>)

문의 조선대학교 의학연구원 근거중심의학연구소 (☎ 062-236-3966, koreagrade@gmail.com)

조선대학교 의학연구원 근거중심의학연구소 GRADE 한국 GRADE 네트워크