### Write a Systematic Review a Systematic Literature Search

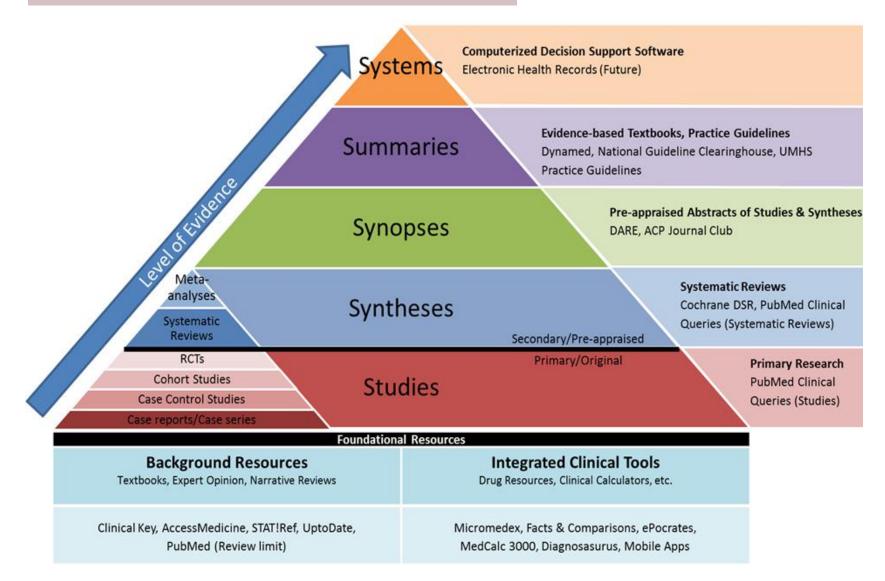
### Flora Fang & Jayden Chou

Reference Librarians, Kun-Yen Medical Library medref@libmail.lib.ncku.edu.tw | 06-2353535 #5122

## Primary v. Secondary Research



# **5S Pyramid of Evidence Resources**



Source: https://guides.lib.umich.edu/nursing/evidence

# "Systematic Review" (SR)

"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 Heading, D000078182)

### ≠ narrative "Review"

- 1. Formulate your question
- 2. Check for other reviews answering your question
- 3. Define inclusion and exclusion criteria, develop your protocol
- 4. Design your search strategy and search for studies
- 5. Manage your search results and document your search strategy

Summary of recommendations for research solutions

- 6. Collect data and critically appraise
- 7. Analyse and interpret results + Meta Analysis
- 8. Write up and present results

Library assistance

# PRISMA 2020 Statement

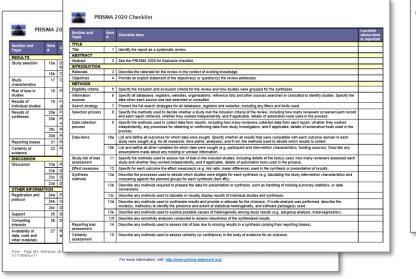
Preferred Reporting Items for Systematic Reviews and Meta-analysis

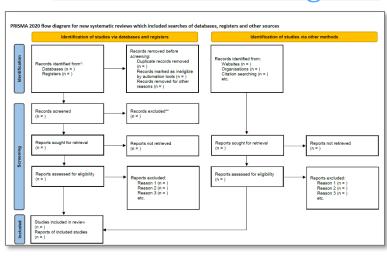
- Authors
- Reviewer/ Editors 

   Peer reviewed
  - Readers
  - Ensure the transparency of systematic review
     → reproducible

### PRISMA Checklist







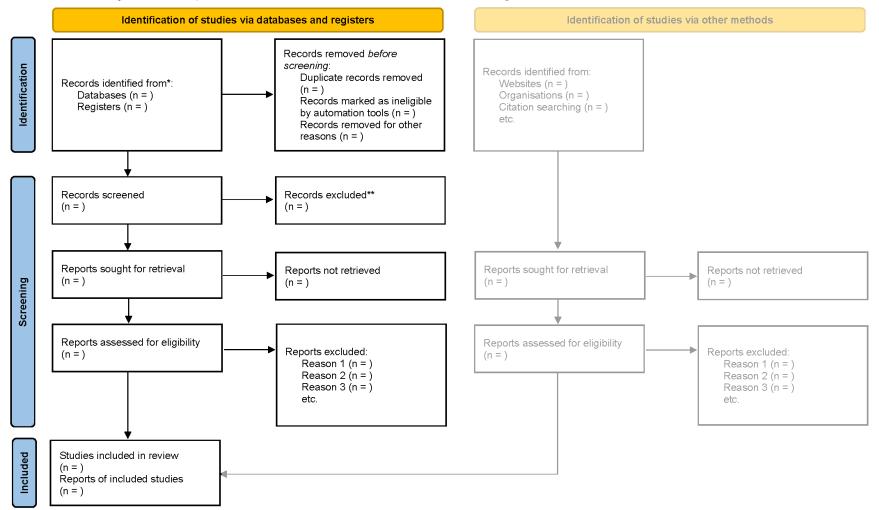
27 items in 7 sections: Title, Abstract, Introduction, Methods, Results, Discussions, Other Information

#### EXTENSIONS

- PRISMA for Abstracts
- PRISMA Equity
- PRISMA Harms (for reviews including Harms)
- PRISMA Individual Patient Data
- PRISMA for Network Meta-Analyses
- PRISMA for Protocols
- PRISMA for Diagnostic Test Accuracy
- PRISMA for Scoping Reviews
- PRISMA for Acupuncture
- PRISMA for Searching
- Extensions in development

## **PRISMA flow diagram**

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers). \*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <u>http://www.prisma-statement.org/</u>

# **PRISMA flow diagram**

F	PRISMA STATEMENT	EXTENSIONS	TRANSLAT	IONS	PROTOCOLS	ENDO	RSEMENT		
ment	PRISMA E&E	Checklist	Flow Diagram	Histor	y & Development	Funding	Citing & U		
	PRISMA Flow	Diagram							
	0	the flow of information thro excluded, and the reasons fo ed to identify studies.	ugh the differer r exclusions. Di	RISMA Flow Diag		agram			
	PRISMA 2020 flow	diagram for new systematic	reviews which	Main options Previous studies	S Other searches for studies				
	PRISMA 2020 flow	diagram for new systematic	reviews which	Not included 🔻	Included -		Identification of new	studies via da	atabases and registers
		diagram for updated system	atic reviews wł	Identification			Records identified from: Databases (n = xxx) Registers (n = xxx)	 	Records removed before screening: Duplicate records (n = xxx) Records marked as ineligible automation tools (n = xxx) Records removed for other
	PRISMA 2020 flow	diagram for updated system	atic reviews wh	Databases	Registers				reasons (n = xxx)
	Flow diagrams can also b	be generated using a Shiny A	App available at	Websites xxx	Organisations		Records screened (n = xxx)	]	Records excluded (n = xxx)
	For more information abo	out citing and using PRISMA	click here.	Citations			Reports sought for retrieval (n = xxx)		Reports not retrieved (n = xxx)
				xxx Duplicates removed			Reports assessed for eligibility (n = xxx)	]	Reports excluded: xxx (n = xxx)
		4 19/10/ (- 4		XXX					
		MIA2U2U age and ShinyApp for making		Automatically exclue	ded Other exclusions		New studies included in review	, T	
	Synthesis R pack Hackathon PRISM	A2020 flow diagrams		XXX	XXX		(n = xxx) Reports of new included studies (n = xxx)	•	
	uhacutiton org	s. XC		Screening Records screened	Records excluded		<u> </u>	-	
Fo	llow this link t	o access the or	nline tool		· · · · · ·				

# **PRISMA Checklist**

PRIS	MA STATEMENT	EXTENSIONS	TRANSLATIONS	PROTOCOLS	ENDORSE	MENT
Statement	PRISMA E&E	Checklist	Flow Diagram	History & Development	Funding	Citing &

#### **PRISMA** Checklist

The PRISMA 2020 statement comprises a 27-item checklist addressing the introduction, methods, results and discussion sections of a systematic review report.



PRISMA 2020 Checklist (PDF)



## PRISMA 2020 Checklist (Word) ← ● self checklist (attach to your manuscript of journal article submission)

The checklist can also be completed using a Shiny App available at https://prisma.shinyapps.io/checklist/

An expanded checklist, which comprises an abridged version of the reporting recommendations presented in the Explanation and Elaboration paper, with references and some examples removed, is also available.

PRISMA 2020 Expanded Checklist (PDF)

### PRISMA Elaboration and Explanation

For more information about citing a

Explanation(Babridged)

- It is strongly recommended that the PRISMA 2020 Statement be used in conjunction with the PRISMA 2020 Explanation and Elabo Document. This document is intended to enhance the use, understanding and dissemination of the PRISMA 2020 Statement. Throu examples and explanations, the meaning and rationale for each checklist item are presented.
  - BMJ (OPEN ACCESS) Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. PRISMA 2020 explanatio elaboration: updated guidance and exemplars for reporting systematic reviews. BMJ 2021;372:n160. doi: 10.1136/bmj.n160

 $oldsymbol{\mathfrak{I}}$  explanation and elaboration  $oldsymbol{\uparrow}$ 

Examples of good reporting for each check and in PRISMA 2020:

For more information about citing and using his Academical S

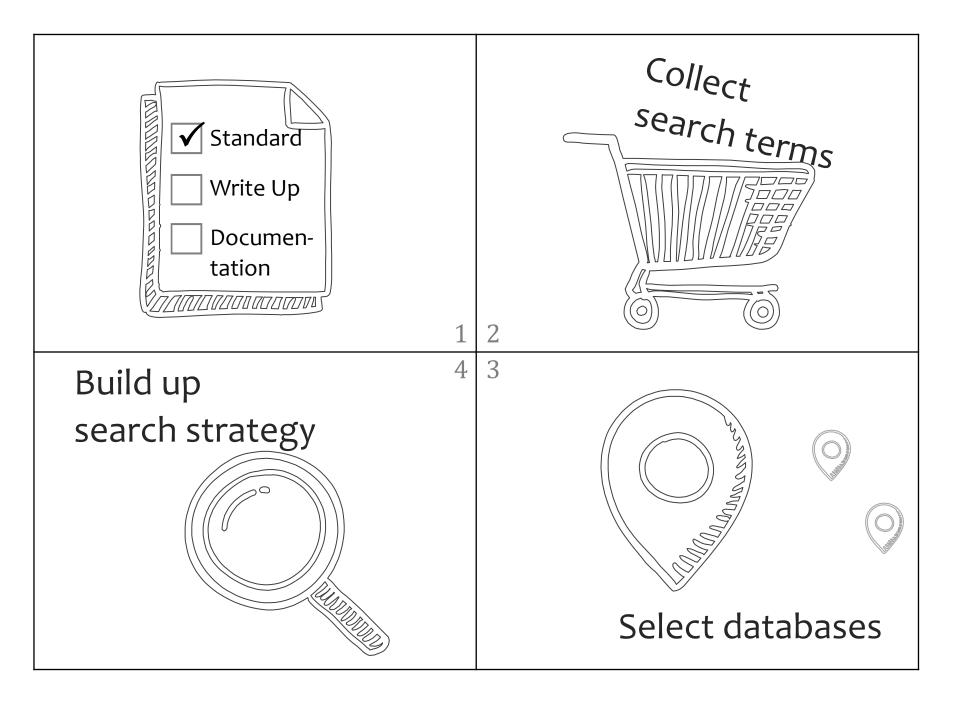
# **PRISMA Checklist**

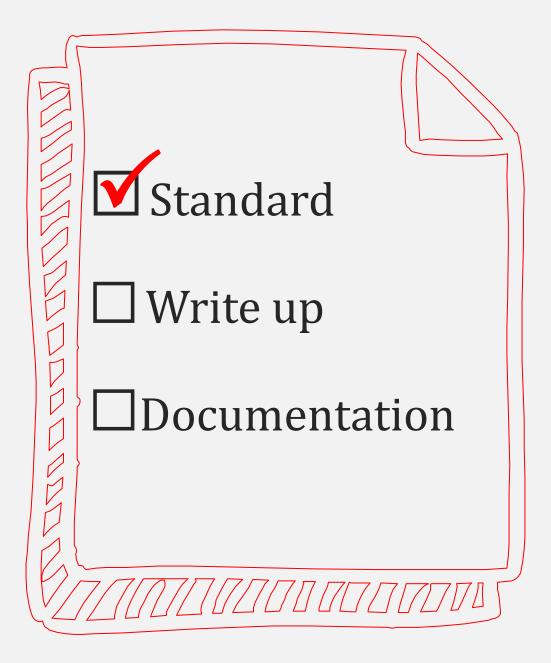
4 items related to literature search and screening

Торіс	7	# Check item	Location where item is reported
METHODS			
Information sources	6	Specify all databases, registers, websites, organizations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	P.xx
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	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, and if applicable, details of automation tools used in the process.	
RESULTS			
Study	1б а	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.	
selection	16 b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	

Question: For adults over age 65 does a daily 30-minute exercise regimen reduce the future risk of heart attack compared with no exercise regimen?







# 文章撰寫 #6 Information Sources

#### **Information Sources**

Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.

#### Methods

#### Data sources and eligibility criteria

The conduct of this systematic review complied with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement to ensure transparent and complete reporting.<sup>18,19</sup> The following 10 databases were searched for relevant RCTs, with no language restrictions, from their inception dates to February 2014: MEDLINE (Ovid), PubMed (Publisher-Supplied Subset, supplementary to Ovid MEDLINE not yet covered), EMBASE, Cochrane Library, CINAHL, PEDro, Index to Taiwan Periodical Literature System, China National Knowledge Infrastructure, and the Wan-Fang Med-Chinese BioMedical Literature Database. Data from completed clinical trials were also obtained from the World Health Organization International Clinical Trials Registry Platform. Reference lists of eligible articles were reviewed to identify additional studies for possible inclusion. E-mail alerts were established to identify newly released studies from the different databases that fell within the scope of our review.

Acupuncture for treating aromatase inhibitor-related arthralgia in breast cancer: a systematic review and meta-analysis. J Altern Complement Med. 2015; 21: 251-60. http://doi.org/10.1089/acm.2014.0083

#### Example 1: In a review examining the effects of altering the availability or proximity of food,

http://www.prisma-statement.org/documents/PRISMA\_2020\_examples.pdf

"We conducted electronic searches for eligible studies within each of the following databases:

- Cochrane Central Register of Controlled Trials (CENTRAL) (1992 to 23rd July 2018);
- MEDLINE (including MEDLINE In-Process) (OvidSP) (1946 to 23rd July 2018);
- Embase (OvidSP) (1980 to 23rd July 2018);
- PsycINFO (OvidSP) (1806 to 23rd July 2018);
- Applied Social Sciences Index and Abstracts (ASSIA) (ProQuest) (1987 to 24th July 2018);
- Science Citation Index Expanded (Web of Science) (1900 to 24th July 2018);
- Social Sciences Citation Index (Web of Science) (1956 to 24th July 2018); and
- Trials Register of Promoting Health Interventions (EPPI Centre) (2004 to 27th July 2018).

We conducted electronic searches of the following grey literature databases using search strategies adapted from the final MEDLINE search strategy, as described above:

- Conference Proceedings Citation Index Science (Web of Science) (1990 to 24th July 2018);
- Conference Proceedings Citation Index Social Science & Humanities (Web of Science) (1990 to 24th July 2018); and
- OpenGrey (1997 to 24th July 2018).

We searched trial registers (US National Institutes of Health Ongoing Trials Register ClinicalTrials.gov (<u>www.clinicaltrials.gov/</u>), the World Health Organization International Clinical Trials Registry Platform (<u>apps.who.int/trialsearch/</u>), and the EU Clinical Trials Register (<u>www.clinicaltrialsregister.eu/</u>) to identify registered trials (up to 25th July 2018), and the websites of key organisations in the area of health and nutrition, including the following:

- UK Department of Health;
- Centers for Disease Control and Prevention (CDC), USA;
- World Health Organization (WHO);
- International Obesity Task Force; and
- EU Platform for Action on Diet, Physical Activity and Health.

In addition, we searched the reference lists of all eligible study reports and undertook forward citation tracking (using Google Scholar) to identify further eligible studies or study reports (up to 25th July 2018)" (20)

# 文章撰寫 #7 Search Strategy

The keywords, hot flush, menopause symptoms, breast cancer, and acupuncture, used in the search included their <u>synonyms (text words) and controlled vocabulary (MESH terms etc.)</u> when available. Based on the MEDLINE (Ovid) search strategy, queries were revised for searches of the other databases. We adopted highly sensitive search syntaxes for identifying randomized trials. <u>S1 Appendix</u> shows the search strategy.

#### S1 Appendix. Search Strategy

Database	#	Search syntax	Citations found
MEDLINE	1	exp Hot Flashes/ OR exp Vasomotor System/ OR exp Sweating/	
	2	(flush* OR ((hot OR night* OR nocturnal*) ADJ5 (flash* OR sweat*)) OR vasomotor).mp	
	3	exp Climacteric/OR exp Primary Ovarian Insufficiency/OR exp Anovulation/	
	4	(climacter* OR menopaus* OR premenopaus* OR perimenopaus* OR postmenopaus* OR pre-menopaus* OR peri-menopaus* OR post-menopaus* OR (mens ADJ3 cessat*) OR (ovarian ADJ3 (fail* OR cessat* OR absen*)) OR anovulation*).mp	
	5	exp Breast Neoplasms/	
	6	((breast OR mamma*) ADJ11 (cancer* OR <u>neopla*</u> OR <u>adenocarcin</u> * OR <u>carcin</u> * OR tumor* OR <u>tumour</u> * OR <u>malignan</u> * OR sarcoma* OR mass* OR DCIS OR ductal* OR <u>infiltrat</u> * OR <u>intraductal</u> * OR <u>lobula</u> * OR medullary)). <u>mp</u>	
	7	exp Acupuncture/OR exp Acupuncture Therapy/OR exp Acupressure/OR exp Transcutaneous Electric Nerve Stimulation/	
	8	(acupunctur * OR acupress* OR acupoint* OR electroacupunctur * OR Shiatsu OR Shiatzu OR "Zhi Ya" OR ZhiYa OR "Chih Ya" OR ChihYa OR "Zhen Jiu" OR ZhenJiu OR "Jui Na" OR JuiNa OR meridian* OR "Ching Lo" OR Chinglo OR "Jing Luo" OR Jingluo OR moxibustion* OR auriculotherapy OR TENS OR PENS OR ((transcutaneous OR percutaneous OR transdermal OR cutaneous) ADJ4 (stimulat* OR electrostimulat*))).mp	
	9	(1 OR 2 OR 3 OR 4) AND (5 OR 6) AND (7 OR 8)	101
	10	9 and ((randomized controlled trial.pt. or controlled clinical trial.pt. or randomi2ed.ab. or placebo.ab, or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab.) not (exp animals/ not humans.sh.))	RCTs: 74
EMBASE	1	'hot flush'/exp OR 'vasomotor disorder'/exp OR 'night sweat'/exp	
	2	(flush* OR ((hot OR night* OR nocturnal*) NEAR/4 (flash* OR sweat*)) OR	

### Search Strategy

Present the full search strategies for all databases, registers and websites, including any filters and limits used.

Effect of acupuncture on hot flush and menopause symptoms in breast cancer- A systematic review and meta-analysis. PLoS ONE 2017; 12: e0180918. https://doi.org/10.1371/journal.pone.0180918

### Write Up #8 Search Strategy

The purpose of this review is to provide an update which may help physicians to properly manage H. pylori infection in patients after gastric surgery. A literature search was conducted mainly in PubMed (1948-), and a supplementary search in Embase (1974-) and Google Scholar. Search keywords used controlled vocabulary (MeSH or Emtree) and text words, including: Helicobacter pylori[MeSH], Helicobacter infections[MeSH], Helicobacter, Campylobacter, H. pylori, C. pylori; gastrectomy[MeSH], gastrectom\*, hemigastrectom\*, gastric surger\*, stomach surger\*; gastric stump[MeSH], stump\*, residual, remnant\*; eradicat\*; spontaneous remissions[MeSH], spontaneous clearance, spontaneous regression\*, spontaneous eradicat\*; atrophic gastritis[MeSH], atrophy[MeSH], atroph\*, dysplas\*; metaplasia[MeSH], metaplas\*; peptic ulcer[MeSH], ulcer\*; stomach neoplasms[MeSH], local neoplasm recurrence[MeSH], second primary neoplasms[MeSH], cancer\*, maliganc\*, carcinoma\*, cancerogen\*, carcinogen\*, neoplasmogen\*, oncogen\*, tumorigen\*. The keywords based on PubMed syntax were adequately revised for the remaining databases. The

Management of Helicobacter pylori infection after gastric surgery. World J Gastroenterol. 2014; 20: 5274–82. http://doi.org/10.3748/wjg.v20.i18.5274

### Search

Present full electronic search strategy for every database, including any limits used, such that it could be repeated.

#### Search strategy

The eight databases searched for this study comprised Medline (Ovid), EMBASE, CENTRAL, PsycINFO, Psychology and Behavioral Sciences Collection (PBSC), CINAHL, Iowa Drug Information Service (IDIS), and Index to Taiwan Periodical Literature System (all from inception to the end of June 2016), and a supplementary search in TRIP Database and Google Scholar. References provided in the selected studies and systematic reviews were further checked for additional citations of published or unpublished reports. Email alerts were established to identify newly released studies from the databases that fell within the scope of our review.

The keywords used in the search were "antipsychotic agents" and "myocardial infarction." The search strategy included <u>free-text</u> and <u>controlled vocabulary</u> terms (e.g., medical subject headings) for these topics. No language restrictions were applied. On the basis of the MEDLINE (Ovid) search strategy, queries were revised to perform the best searches in the other databases. The MEDLINE (Ovid) search strategy is shown online in Supplementary Table 2.

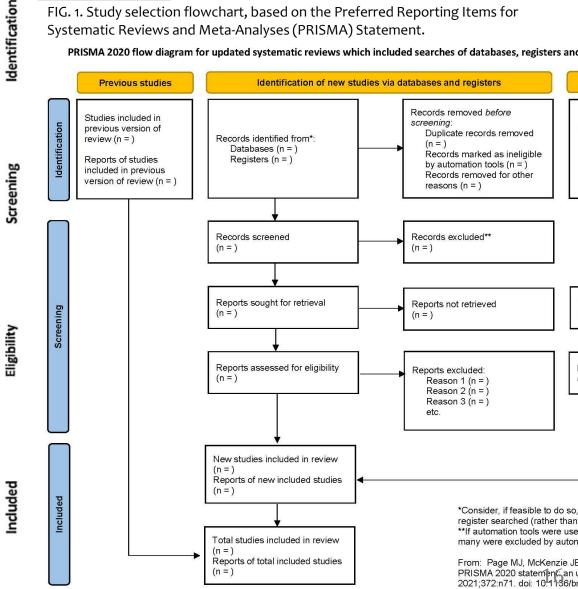
Myocardial infarction risk and antipsychotics use revisited: a meta-analysis of 10 observational studies. J Psychopharmacol. 2017; 31: 1544–55. http://doi.org/10.1177/0269881117714047

# Write Up #17 Study selection

**PRISMA Flow Diagram** http://prismastatement.org/prismastatem ent/flowdiagram.aspx

FIG. 1. Study selection flowchart, based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement.

PRISMA 2020 flow diagram for updated systematic reviews which included searches of databases, registers and



#### **Study Selection**

Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.

#### **Results**

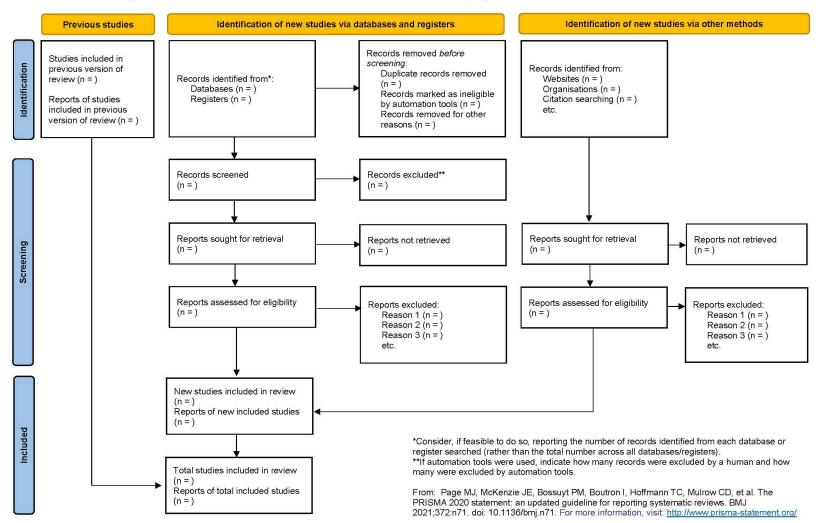
#### Study description

Searches of the 10 databases led to identification of 263 potentially relevant articles, 251 of which were ultimately excluded. Among the excluded files, 20 articles were duplicates, 223 titles/abstracts were irrelevant, and 8 did not have matching full text or were nonclinical trials (Fig. 1).

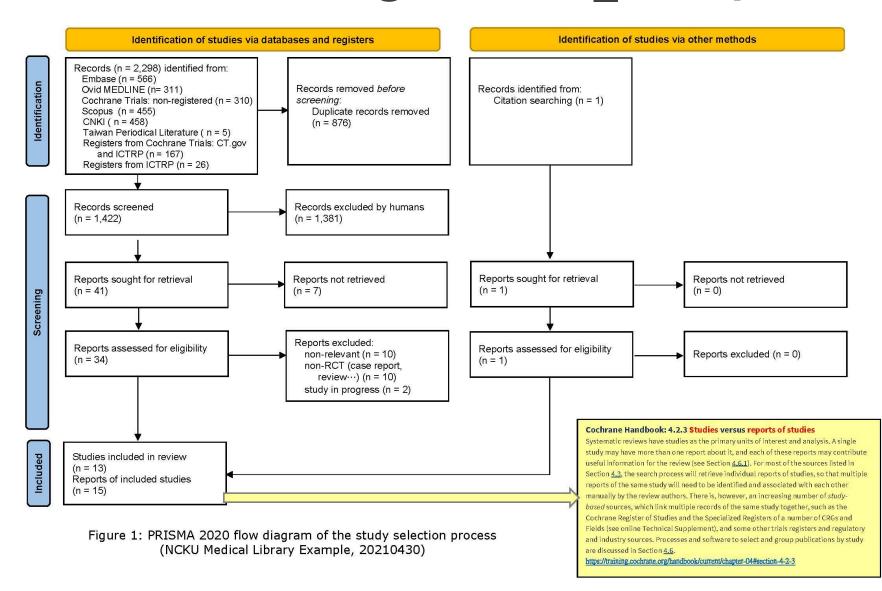
J Altern Complement Med. 2015, 21: 251-60.

# **PRISMA Flow Diagram 2020**

PRISMA 2020 flow diagram for updated systematic reviews which included searches of databases, registers and other sources



## PRISMA Flow Diagram 2020\_Example



http://www.medlib.ncku.edu.tw/program/coursedoc/preview.php?idcourse=1014&name=SRSearch%20form\_blank.docx

(研究問題簡稱可填於此 Insert your research question here.)

#### 進行系統性回顧之文獻搜尋紀錄表

Literature Search for Conducting Systematic Review: Documentation Form

#### 1. 研究問題 Question

Question:	
Population	
Intervention	
Comparison	
Outcome	
Type of Question/ Publication Type	

### Documentation Form

#### 2. 檢索詞 Search Terms

	中文同義字 Chinese Synonyms	英文同義字 English Synonyms	控制詞彙 Emtree / MeSH Controlled Vocabulary
Р			
ī			
с			
o			

#### 3. 搜尋資料庫 Searched Databases

	新			書目紀錄筆數 Citations						
資料庫 Database	文 通 Alert	搜尋日期 Date searched	搜尋結果 Records identified through database searching	篇名摘 Record duplicates	複後 / 要待篩 ds after removed / screened	Full-text	ed for	納入質性綜 Studies included qualitative synthesis	述 纳入统合分析 lin Studies included in quantitative synthesis	
1) Embase										
2) MEDLINE										
3) CENTRAL				]						
4)										
5)				]						
additional sources	-	-								
文獻篩選流程 <u>PRISMA flow diagram</u> :			included: included:		inclu	ded:	included:	included:		
	文獻師進流程 <u>PRISMATIOW diagram</u> :			5:	exclu	uded:		xcluded: 月排除理由	excluded: 說明排除理由	

### Documentation Form

註 2: 篩選流程自去除重複後,每階段都需要兩位評讀者 Reviewers 獨立進行再集整共識,必要時由第三位裁決 After deduplication,

every screening stage requires two reviewers to check the articles independently, the files will be sent to a third reviewer if necessary.

註 3: 重複排除與篩選流程管理,可利用相關軟體,例如 EndNote (<u>for SR 教材下載</u>後須解壓缩) You can use EndNote software to manage deduplication and screening process.

註 4: 請保存自資料庫輸出之各書目紀錄原始檔案,可供未來更新搜尋比對新增書目使用。Please keep all the original bibliography files exported from databases for future use.

資料庫 Database	#	搜尋語法 Search syntax	結果筆數 Citations found
1)	1		
Embase	2		
	3		

#### 4. 搜尋策略 Search Strategy (投稿時附上此項為 Appendix ) This table should be included as an appendix to journal article.

5. 附註 Notes (包含檢索畫面截圖)

Notes: Include screenshot of search results in advanced search

### **Search syntax for Systematic Review**

#### (Update: 2021.3)

Syntax	Engineering V	EBSCOhost	Cochrane L	WoS	Scopus
Truncation (multi-character)	combin* an*emia	combin*	combin* an*emia *glip*tin*	combin* an*emia *glip*tin*	combin* an*emia *glip*tin*
Wildcard <b>(single character)</b>	? = single character	combine? g?rd ? = single character # = 1 or more character	combine? g?rd ?lide	combine? g?rd ?lide ? = single character \$ = 1 or more character	combine? g?rd ?lide ? = single character
Exact phrase search	"high dose"	"high dose"	"high dose"	"high dose"	"high dose"
Proximity (in exact order)		solar w2 energy separated by 2 words	solar next/2 energy separated by 2 words		solar pre/2 energy separated by 2 words
Proximity (unordered)		solar n2 energy separated by 2 words	solar near/2 energy separated by 2 words	solar near/2 dose separated by 2 words	solar w/2 energy separated by 2 words
	and	and	and	and	and
Boolean operator	or	or	or	or	or
	not	not	not	not	and not
more → Free-text search in certain fields less→	simulation WN ALL)	pain OR ache Search in "Select a Field (Optional)" ti (pain OR ache) OR ab (pain OR ache)	(pain OR ache <mark>):ti,ab,kw</mark>	<b></b>	title-abs-key(pain)
Controlled vocabulary search (w/ or w/o narrower terms)	("3D modeling" WN CV) OR ("computer simulation" WN CV add terms in parentheses	<b>DE</b> "pain" OR DE "abdominal pain" /) add terms in parentheses or add individually	[mh "pain"] [mh ^"pain"] add individually lowercase only	-	-
Subheading		mw "SU"	[mh /SU]	-	-
Combine search sets manually	#1 AND #2	S1 AND S2	#1 AND #2	#1 AND #2	#1 AND #2

# **Proximity Search**

(Engineering Village- Compendex as an example)

 NEAR proximity- search terms that are near to each other <u>in any order</u>

Laser NEAR/4 diode

**Proximity number**: maximum number of words that are indexed between the two words in the search query. If no number of words is specified, four (4) words are assumed.

#### **Examples:**

external cavity diode laser system diode-pumped solid-state laser HALNA laser diode

# Wild cards & Truncation

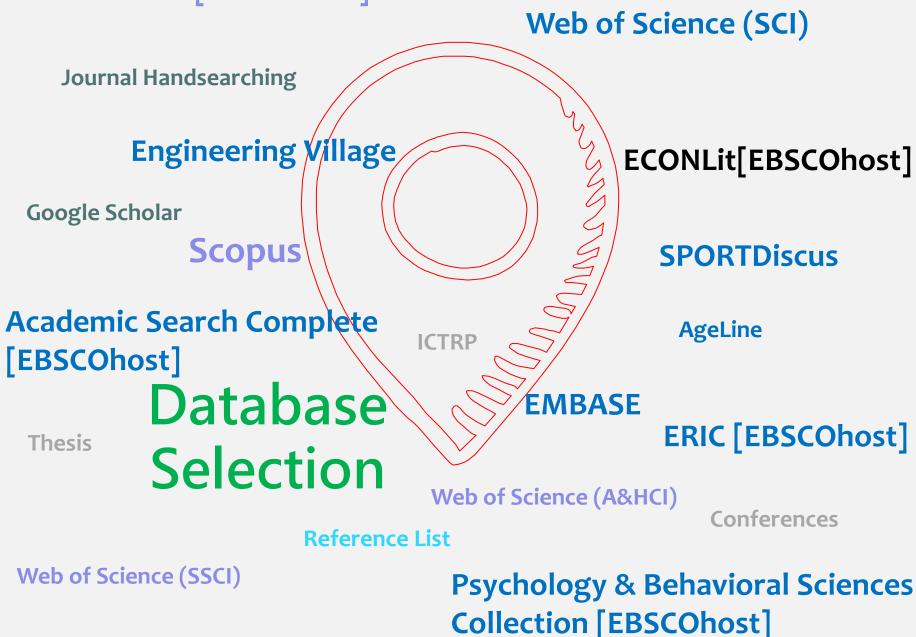
- Wildcard
  - Single character (?): replace a single character anywhere in a word. One question mark for each character.
    - Examples:
      - wom?n finds woman, women
      - t??th finds tooth, teeth, truth, tenth
  - Multi-character (\*): replace 0 to X number of characters anywhere in a word
    - Examples:

sul\*ate finds sulfate, sulfonate, sulphate, sulphonate

- Truncation (\*) (at ending of search term): retrieves all the words that start with the same letters as the truncated term up to the point that the truncation symbol is used.
  - Examples:

Comput\* finds computers, computing, computerize

### SPORTDiscus[EBSCOhost]

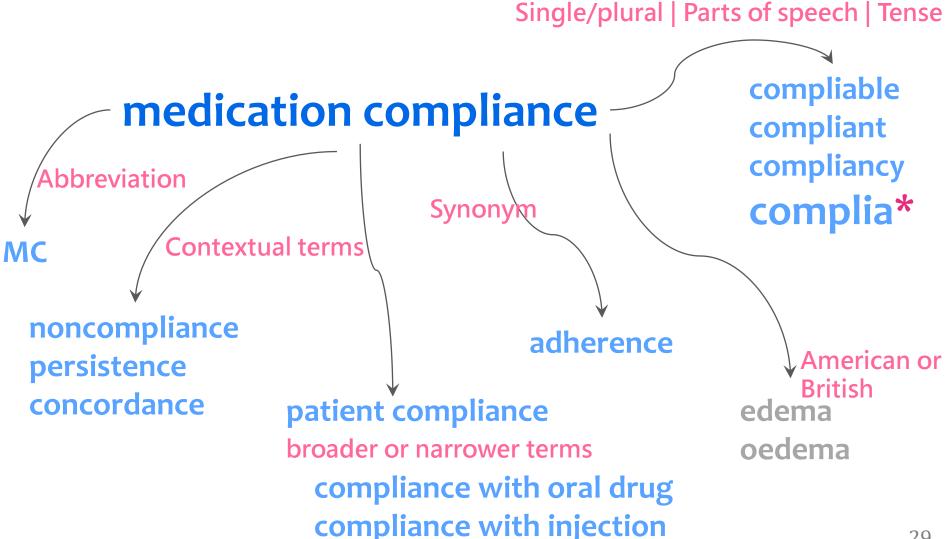


## **Recommended databases**

Social Sciences	Science & Tech		
<ul><li>Language</li><li>MLA International Bibliography</li><li>LLBA</li></ul>	<ul> <li>Biological Science Database [ProQuest]</li> <li>Life Science</li> </ul>		
<ul> <li>Literature Online Literature</li> <li>Business</li> <li>Business Source Complete [EBSCOhost]</li> <li>Education</li> </ul>	<ul> <li>Medicine</li> <li>MEDLINE</li> <li>Embase</li> <li>Engineering Village</li> <li>Compendex Engineering</li> </ul>		
<ul> <li>ERIC [EBSCOhost]</li> <li>SPORTDiscus [EBSCOhost] Sports</li> </ul>	<ul> <li>ACM Digital Library</li> <li>IEEE Electronic Library (IEL)</li> <li>Computer Science</li> </ul>		



# Free text (Type of Synonyms)



# Free text (Synonym) Inspiration

- Dictionary/ Translator
- Browse for possible articles → Google, Google Scholar
- Controlled vocabularies- Look for synonyms or related terms
- Imagination!!

## Search terms (Demo content is not complete)

Use synonyms to search for controlled vocabularies

 Synonyms
 Controlled vocabularies (EV)

 P
 Blockchain

 I
 Internet of things

**O** Security of data

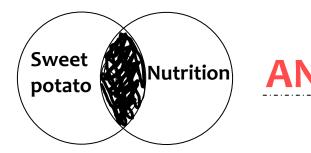


# Synonym: Appendices of previous SR

Zhu(2011): Acupuncture for pain in endometriosis				
Appendix 1. Electronic Sea 10 exp Acupuncture/ (758)	arches: Ov	Li (2011): Acupuncture f Hyperactivity		cit
<ul> <li>10 exp Acupuncture/ (758)</li> <li>11 exp acupuncture therapy/ or exp ac acupuncture analgesia/ or exp acup electroacupuncture/ or exp meridia (11341)</li> <li>12 acupressure\$.tw. (321)</li> </ul>		14 acupuncture therapy/ o		. ,
<ul> <li>13 Acupuncture.tw. (8965)</li> <li>14 (electroacupuncture or e</li> <li>15 meridian\$.tw. (2643)</li> <li>16 mox\$.tw. (4513)</li> <li>17 (shiatsu or tui na).tw. (5</li> <li>18 needling.tw. (777)</li> <li>19 shu.tw. (317)</li> <li>20 acup\$ point\$.tw. (752)</li> <li>21 or/10 20</li> </ul>	Appendix 1. exp act 2. acupun 3. acupres 4. electroa 5. meridia	ss\$.mp acupunc\$.mp an\$.mp		
21 or/10-20	6. acupoir	nts\$.mp		39



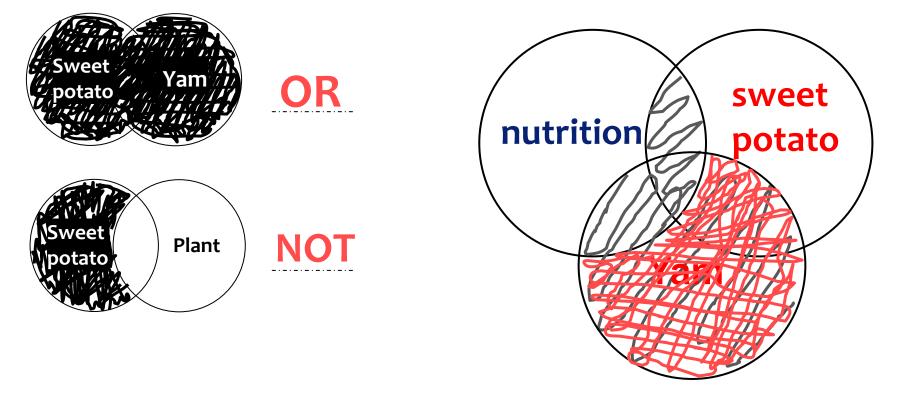
## **Boolean Operator: AND/ OR/ NOT**



- 1. nutrition AND sweet potato OR yam
- 2. sweet potato OR yam AND nutrition



= (nutrition AND sweet potato) OR (nutrition AND yam)



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### Phrases, Proximity Operator (Embase)

Operator	Hits	Meaning
"high dose"	119,000	Exact phrase search
high next/2 dose	123,000	This will find terms which are within <b>2</b> words of each other, <b>in the order specified</b> . ex. Effects of high vs. low dose statin therapy
high <mark>near/2</mark> dose	124,000	This will find terms which are within <b>2</b> words of each other, <b>in either direction</b> . ex. H7N9 influenza virus shows low infectious dose, high growth rate
high dose	435,000	high AND dose $\rightarrow$ more irrelevant articles ex. A patient complained he would adjust the dose of medication, because of his high or low mood

## **Search fields matter**



All fields Title Title or Abstract Title,Abstract,Author keywords Author keywords Emtree term - exploded Abstract

# Which one is highly relevant? (Roselle)

Cost-effectiveness of interferon gamma release assays vs tuberculin skin tests in health care workers.

de Perio MA, Tsevat J, <mark>Roselle</mark> GA, Kralovic SM, Eckman MH. Arch Intern Med. 2009 Jan 26;169(2):179-87.

### Roselle for hypertension in adults.

Ngamjarus C, Pattanittum P, Somboonporn C.

Cochrane Database Syst Rev. 2010 Jan 20;(1):CD007894. doi: 10.1002/14651858.CD007894.

Nutritional composition of minor indigenous fruits: cheapest nutritional source for the rural people of Bangladesh.

### Abstract

In line of the development of a food composition database for Bangladesh, 10 minor indigenous fruits were analysed for their nutrient composition comprising ascorbic acid, carotenoids and mineral values. Nutrient data obtained have been compared with published data reported in different literatures, book and United States Department of Agriculture-National Nutrient Database for Standard Reference. Ascorbic acid was highest in Wood apple and lowest in Roselle. Monkey