# 系統性文獻回顧研究

發揮圖資人的搜尋本能

#### 方靜如

成功大學醫學圖書分館‧參考館員 成大醫院實證教學小組‧醫圖代表

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Systematic Review, SR

### 第19 屆醫療品質獎實證醫學類文獻查證臨床組-南區場

### 情境題

試題

32歲的陸小姐,小孩剛滿週歲,看到寶寶手冊裡面建議接種麻疹、德國麻疹與腮腺炎疫苗 (MMR vaccine)。前一陣子國內傳出麻疹群聚感染,她上網查了一下,一直猶豫小孩到底該不該接種這個疫苗,因為她查到有研究顯示,接種這個疫苗與之後發生自閉症有關,她很擔心如果小孩之後得自閉症該怎麼辦。另外,她自己最近要到沖繩出差,那邊仍有零星疫情,回想自己小時候有接種疫苗,但她不知道要不要補打。

她想問,接種這個疫苗的預防效果好嗎?接種疫苗是不是真的會造成小孩自閉症?她有打過疫苗,疫苗效果可以維持多久呢?她還要再補打嗎?

你是被諮詢的醫療人員,請利用證據回答這位焦急媽媽的問題。

#### 焦點新聞



迷信「神保佑」不打疫 苗 美猶太社區麻疹擴散



國內新增2例麻疹 3/24 搭高鐵661車次須當心



美國紐約爆麻疹疫情當局進入30天緊急狀態

### 小兒泌尿道感染-大小寶同病不同命



尿道攝影 (VCUG)

Mayo Clinic Health System. <a href="https://youtu.be/V19ghG">https://youtu.be/V19ghG</a> u7Pg



腎臟核子醫學掃描(DMSA)





全部 圖片 新聞 影片 地圖 更多▼ 搜尋工具

約有 112,000 項結果 (搜尋時間: 0.38 秒)

小兒及兒童中耳炎作者:臺大醫院耳鼻喉部兒童耳鼻喉科許巍鐘主治醫... epaper.ntuh.gov.tw/health/201212/child\_1.html ▼

中耳炎是嬰<mark>幼兒</mark>及兒童很常見的一個疾病,根據流行病學的研究顯示,1歲以前的嬰... 急性中耳炎治療 ,傳統教科書都載明必須投予10到14天的口服抗生素,才是一個...

### 小兒中耳炎一定要用抗生素治療嗎? | 世鴻耳鼻喉科醫療 entdoctor.com.tw/小兒中耳炎一定要用抗生素治療嗎?/▼

2013年3月18日 - 在門診時,經常會有罹患中耳炎小朋友的父母,很心疼的問:是否可以不要吃那麼久的抗生素?吃的臉色都不好看了!小兒中耳炎是否一定要用...

育兒知識:兒童急性中耳炎簡介,與預防。 - 白袍旅人twkid.com/p/1069 ▼

2015年3月3日 - 根據統計,有75%的小朋友曾經得過中耳炎。不過,另一方面,在台灣中耳炎也有過度診斷的問題,也有經常直接使用後線抗生素之類的問題。

黃瑽寧:急性中耳炎衛教/人物·專題-專欄/親子天下www.parenting.com.tw > 人物·專題 > 專欄 ▼

很多媽媽以為耳朵痛就一定是中耳炎,錯。耳朵痛有太多的原因,可能是外耳炎,也可能只是因為發燒,有些孩子發燒就會耳朵痛,但不見得都是中耳炎。中耳炎... 您瀏覽過這個網頁。

### 中耳炎的4述思+5預防-懷孕·生產·育兒·情報站-嬰兒與母親知識補給www.mababy.com>知識補給▼

當孩子耳朵流出膿或水,或說耳朵痛,一定是<mark>中耳炎</mark>嗎?為什麼孩子感冒容易併發<mark>中耳炎</mark>?中耳炎</mark>的治療一定要服用<mark>抗生素</mark>嗎?得過中耳炎的孩子嚴禁游泳?中耳炎的...

#### 近5成幼童中耳炎 易反覆發作

2015年04月12日

傳送





更多專欄文章

Impact Factor 5.226 (Q2)





又發燒不舒服了!(設計 對白)

小朋友常哭鬧不休,可能要擔心細菌感染 誘發中耳炎,馬偕紀念醫院小兒感染科主 治醫師黃瑽寧表示,國際《傳染病期刊》

(Journal of Infectious Diseases)曾刊出一篇對中耳炎的流行病學研究,3歲前幼童有46%至少得過3次中耳炎,除了疼痛感外,還可能伴隨發燒、哭鬧、食欲不振等症狀,雖僅有極少數患者在不治療的前提下引起聽力缺損,但家長們仍不可輕忽,建議易反覆感染中耳炎的小孩可施打疫苗預

防。報導/黃子倫 攝影/施偉平

黃瑽寧醫師指出,中耳炎主要因肺炎鏈球菌或不分型嗜血桿菌感染耳道引起,臨床觀察有75%的幼童都罹患過中耳炎,且年紀越小越容易感染,尤其3歲前孩子更是常見,主因在於小朋友耳咽管較短,細菌易從鼻腔跑到中耳腔,直到7、8歲後,孩子的耳咽管功能較健全,自然感染機率較低。

另外,有部分的孩子因帶有過敏性鼻炎,以及先天體質影響,導 致耳咽管的排菌能力較差,若再加上常躺著喝奶瓶,讓耳咽管處 在壓力不平衡的狀態下,甚至是暴露在二手菸的環境中,都易造 成中耳炎反覆發作,臨床也常見感冒的小孩,因鼻涕帶菌而感染 中耳炎。





幼童常摸耳朵並不一定 是中耳炎感染。

#### 耳痛 不一定感染

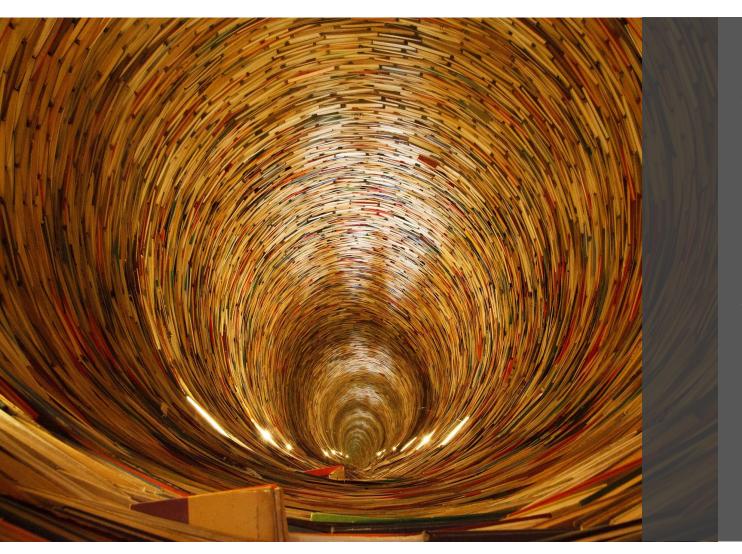
黃瑽寧醫師進一步提到,雖說中耳炎症狀包括耳痛、耳壓不平衡、耳鳴等,診間更常見憂心家長帶著摀著耳朵的孩子前來求診,但其實孩子常抓耳朵感覺不舒服並不一定是中耳炎,也可能是單純發燒或是外耳炎引起,尤其年紀小還不太會表達的孩子,感染中耳炎時常以哭鬧、食欲不振等症狀表現。

建議有疑慮的家長應帶孩子至小兒科檢查

,若經確診中耳腔發炎化膿,針對2歲以下的孩子會直接施以抗生素治療,而2歲以上通常會先開立止痛藥,並請父母帶回家自行觀察約2~3天,視症狀有無自行好轉,若無再回診施以抗生素治療,原因在於讓年紀大一點的孩子減少抗生素的使用,以免日後增加抗藥性。

# 醫學是門不完美的科學

《一位外科醫師的修煉,葛文德》



醫學是門不完美的科學 是個瞬息萬變的知識體 我們得到的訊息不一定靠得住 而執行醫療業務的人不免會犯錯 同時面對的卻是性命攸關的

我們所作所為的確是有科學根據的 但我們也依靠習慣、本能 有時也得猜測,碰碰運氣

在我們既有的知識和我們的目標之間 永遠有一段落差 這個落差使得我們做的每一件事更加複雜

# 節目表

- 實證醫學簡介
- SR 研究標準
- SR 課程與教案
- SR 服務發展
- 圖書館(員)在在SR



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# 實證醫學

改善和評估病人照護為目標的醫學實踐方法

需要明智地結合

最佳研究證據 + 臨床經驗 + 病人價值觀

做出最佳醫療照護決策

或為特定族群制定臨床指引

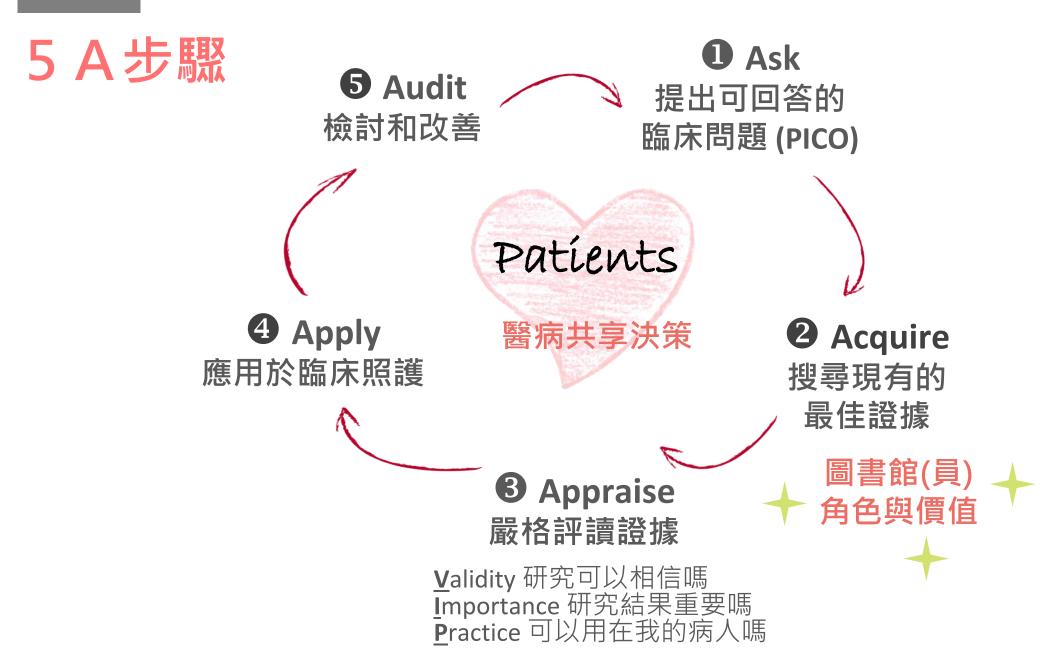
# 實證醫學

不僅是白色巨塔裡的科學,全民你我他該瞭解!

醫療人員 — 採行最佳研究證據以做為臨床照護的參考!

一般大眾 — 不迷惑於專家說「吃OO有助於XX」!

病人/家屬 — 檢視眼前的證據,並捫心價值觀 做出無悔的診治決定!



# 提問

患有五十肩的中年男性,施予肩關節囊擴張術相較於類固醇注射,能改善關節活動程度嗎?

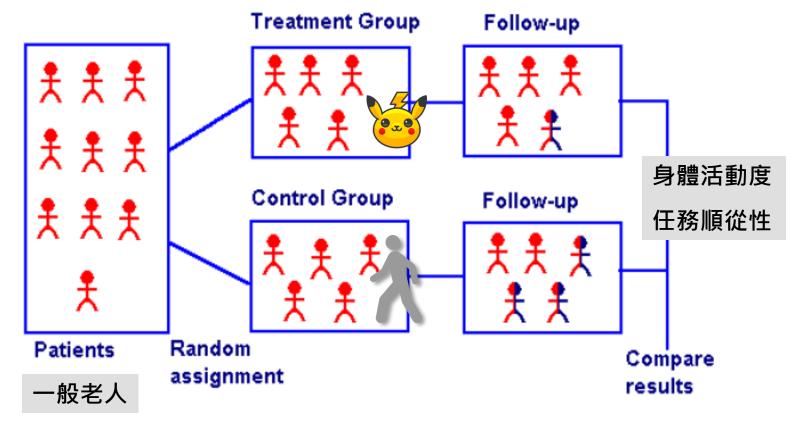
	P		C	0
	Patients / Problem	Intervention / Exposure	Comparison	Outcomes
	誰是病人或族群 (性別、年齡等) 何種疾病或症狀	關注的 治療方式 診斷工具 暴露因子	既有或對照的 治療方式 診斷工具 暴露因子	有意義可測量的 臨床結果 [有效性] 改善症狀、 增加存活、避免危 險因子 [安全] 死亡、副作用
診斷	疑似有五十肩患者	病人自我檢測表	醫師問診與理學 檢查	診斷正確性
治療	五十肩的中年男性	<b>肩關節囊擴張術</b>	類固醇注射	肩關節活動程度
傷害	五十肩的中年男性	小針刀	一般針灸	神經損傷
病因	中年男性	奶爸史併高血糖		五十肩的發生
篩檢	有肝癌家族史的 中年男性	每年一次 完整肝功能篩檢	不做肝功能篩檢	肝癌發生率

## 證據等級→研究設計與偏差風險 Oxford Levels of Evidence v.2, 2011

1		Step 1 (Level 1*)			Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
	How common is the	ow common is the roblem? Local and current random sample surveys (or censuses)		Systematic review of surveys Local non-random sample** that allow matching to local circumstances**			n/a
		Systematic review of cross sectional studio consistently applied refe standard and blinding	es with erence	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**	Case-control studies, or "poor or non-independent reference standard**	Mechanism-based reasoning
先		Systematic review of inception cohort studi	es	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case- control studies, or poor quality prognostic cohort study**	n/a
視		Systematic review of randomized trials or <i>n</i>		Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study** 證據等	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
題類型	OMMON harms? 問題多常見 <u>診斷</u> 工具準	嗎?	1	study with dramatic effect	study (post-marketing surveillance) provided there are sufficient numbers to rule out a common harm. (For long-term harms the duration of follow-up must be sufficient.)**	or historically controlled studies**	reasoning
	如果不治療 介入治療有	的 <u>預復</u> (		Randomized trial or (exceptionally) observational study with dramatic effect			
	介入治療 <mark>常見副作用</mark> ?		Randomized trial	Non -randomized controlled cohort/follow-up study**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning	
	┗ 介入治療 <u>罕</u> ■ 值得早期 <u>篩</u>						

### Randomized Controlled Trial (RCT)

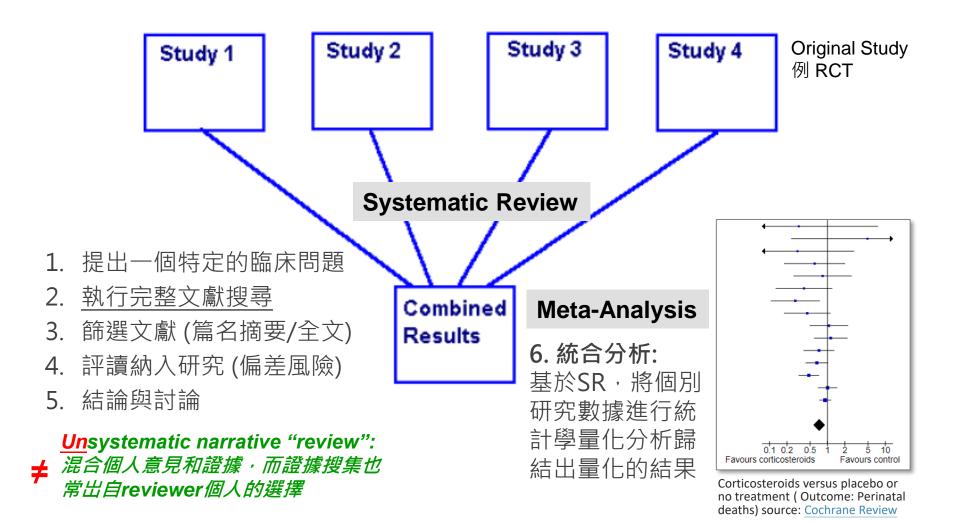
隨機對照試驗



有介入·有對照·有隨機

(排除其他變數)

# 系統性回顧 Systematic Review (SR)



SR Picture: SUNY Downstate EBM Tutorial

### American Journal of Preventive Medicine

REVIEW ARTICLE

#### Impact of Pokémon Go on Physical Activity: A Systematic Review and Meta-Analysis

Madina Khamzina, MPH, <sup>1</sup> Kaustubh V. Parab, MPH, MBBS, <sup>1</sup> Ruopeng An, PhD, <sup>1,2</sup>
Tiffany Bullard, PhD, <sup>1</sup> Diana S. Grigsby-Toussaint, PhD<sup>3</sup>

**Context:** Pokémon Go is a popular mobile augmented reality game that requires players to travel to different locations to capture virtual characters. This study systematically reviews and quantifies Pokémon Go in relation to physical activity engagement among players.

Evidence acquisition: A keyword search was conducted in PubMed, Web of Science, Scopus, EBSCO, SPORTDiscus, PsycINFO, ScienceDirect, and Cochrane Library for articles published between July 2016 and October 2018. Meta-analysis was performed to estimate the pooled effect of playing Pokémon Go on physical activity outcome.

Evidence synthesis: From the keyword search, 17 studies (16 observational and 1 pre—post) were identified, with a total sample of 33,108 participants. A comparison between Pokémon Go players and nonplayers and between pre- and post-play time points revealed an increase in walking duration, distance walked, and number of steps/day. Pokémon Go players were also found to engage in less sedentary behavior. Playing Pokémon Go was associated with an increase in the number of steps per day by 1,446 steps (95% Cl=953, 1,939; 1²=81%).

Conclusions: Playing Pokémon Go was associated with a statistically significant but clinically modest increase in the number of daily steps taken among game players. One challenge for future physical activity interventions using Pokémon Go is to retain active engagement once the initial novelty wears off. Additional studies with longer follow-up periods and experimental study design are needed to assess to what extent Pokémon Go and other augmented reality games can be used to promote physical activity at the population level for a sustained time period.

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#### CONTEXT

B eing physically active can help prevent chronic disease, maintain a healthy weight, and improve quality of life.\(^1\) The rapidly growing availability and use of mobile health applications creates opportunities to promote physical activity and an active lifestyle at the population level.\(^2\) Pokémon Go was not designed to explicitly promote physical activity, yet this game has had great success in reaching millions of people and holds the potential to influence daily activities. Before Pokémon Go, other exergames (i.e., the new generation of active video games) that incorporate aspects of physical activity have gained popularity.\(^3\) Previous research shows that playing exergames may promote energy expenditure, weight loss, and overall health.\(^4\) Researchers have previously examined

the potential of GPS-based games that promote physic activity via interactive gameplay, such as geo-caching These types of games present an enjoyable and appealir alternative to traditional physical activities and off opportunities for increased social interaction and tin spent outdoors. However, public health efforts encourage physical activity via a large number of the

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https://doi.org/10.1016/j.amepre.2019.09.005

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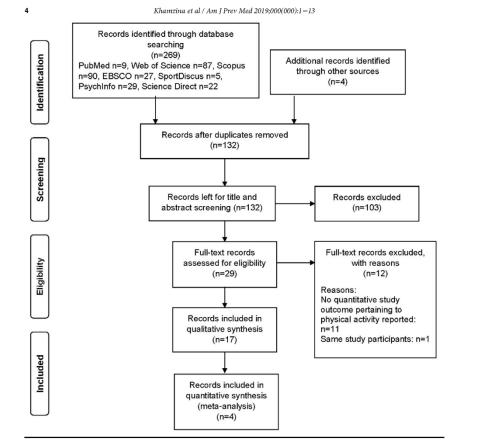


Figure 1. PRISMA study selection flowchart.

#### DISCUSSION

The primary focus of this review was to evaluate the impact of playing the Pokémon Go game on physical activity level. With rapidly evolving technologies in the field of behavioral medicine, Pokémon Go, though unintentionally, was able to reach masses of its users and influence their health behavior. Pokémon Go, not being a mobile health application, is an example of technology-leveraged behavioral intervention that was able to facilitate factors of physical activity outcomes. The

interface and functionality of the game exceeds traditional understanding of mobile health by providing a different way to individualize health interventions. <sup>39,40</sup> Nevertheless, it should be noted that worldwide popularization of Pokémon Go raises concerns regarding potential risks players may encounter during their travel through various landscapes. <sup>15</sup> In one study, 34% of the players reported some adverse events (e.g., bone fracture, trauma, and skin injury). <sup>25</sup> Another study reported that 9% of the sample suffered from accidents related to pedestrians, cars, or furniture. <sup>31</sup> Player safety my need

www.ajpmonline.org

 Table 1. Basic Characteristics of the Studies Included in the Review

Study ID	First author (year)	Country	Study design	Sample size	Age (years)	Female (%)	Measures	Intervention duration
1	Althoff (2016) <sup>9</sup>	U.S.	Observational	27,126	Median: 33	25	3 axis accelerometer; gyrometer of a wrist-worn consumer activity tracking fit-device -Microsoft Band	4 weeks
2	Barkley (2017) <sup>6</sup>	U.S.	Observational	358	19.8±2.1	52	Personal physical activity monitor (e.g., accelerometers, pedometers), questionnaire (IPAQ)	3 weeks
3	Broom (2018) <sup>30</sup>	U.K	Observational	461	$28.8 \pm 9.56$	57	Short version questionnaire (IPAQ)	3 months
4	Escaravajal- Rodriguez (2018) <sup>31</sup>	Spain	Observational	714	24.86±5.5	38	Ad-hoc opinion questionnaire	
5	Fountaine (2018) <sup>32</sup>	U.S.	Observational	27	21.5±2.6	70	Accelerometer; pedometer; analog electrocardiogram heart rate monitor and watch, PAR-Q questionnaire	60 minutes
6	Howe (2016) <sup>33</sup>	U.S.	Observational	1,182	26.49±4.55	71	iPhone 6 smartphone, questionnaire	10 weeks
7	Kogan (2017) <sup>34</sup>	U.S.	Observational	269	18 and older	68	Questionnaire	
8	Liu (2017) <sup>35</sup>	U.S.	Observational	47	$28.7 \pm 5.9$	47	Questionnaire	
9	Ma (2018) <sup>36</sup>	Hong Kong	Observational	210	$26.1 \pm 8.7$	33.8	iPhone "health" application, questionnaire	21 days
10	Madrigal (2018) <sup>37</sup>	Costa Rica	Observational	1,059	18 and older	52	National household survey	
11	Marquet (2018) <sup>15</sup>	U.S.	Observational	74	19.6	50	Smartphone-enabled accelerometers, IPAQ short form	
12	Militello (2018) <sup>39</sup>	U.S.	Observational	160 adults, 31 children	N/A	71.9; 28.8	Revised Godin Leisure Time Exercise Questionnaire, family's characteristics and Pokémon GO user experience, healthy lifestyle beliefs scale, child characteristics and Pokémon Go user experience, parental influence on physical activity scale	
13	Nigg (2017) <sup>40</sup>	U.S.	Observational	N/A	28.6±8.5	57.8	Revised Godin leisure time exercise questionnaire	
14	Ruiz-Ariza (2018) <sup>16</sup>	Spain	Observational	190	13.32±1.07	49	Adolescent Physical Activity measure questionnaire	8 weeks
15	Wattanapisit (2018) <sup>38</sup>	Thailand	Observational	26	22.04±1.70	26.9	Global Physical Activity Questionnaire	4 months
16	Wong (2017) <sup>29</sup>	Hong Kong	Observational	644	18-60	52	IPAQ short form	
17	Xian (2017) <sup>3</sup>	U.S.	Pre-post	167	25 (median)	48	iPhone health application, questionnaire	

IPAQ, International Physical Activity Questionnaire; N/A, not applicable; PAR-Q, Physical Activity Readiness Questionnaire; UK, United Kingdom.



https://pixabay.com/photos/puzzle-pieces-puzzle-patience-mesh-1925425/

## 檢索路數大不同

# 證據產出者

**Evidence Maker** 



VS

### **High Sensitivity**

- Systematic Review
- Scoping Review
- Practice Guideline
- Systematic Search

### 證據使用者

**Evidence User** 



### **High Specificity**

- 臨床應用/養成
- 競賽: 查證/臨床
- •一般文獻查證

# SR研究標準

- Cochrane Handbook
- MECIR
- PRISMA Statement



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### **Cochrane Handbook**

#### Part 1: About Cochrane Reviews

- Introduction
- II. Planning a Cochrane Review
- III. Reporting the review
- IV. Updating the review
- V. Overviews of Reviews

#### Part 2: Core methods

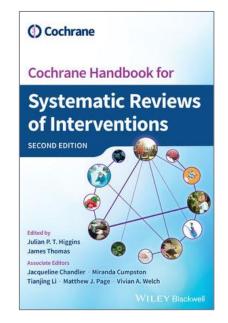
- Starting a review
- 2. Determining the scope and questions
- 3. Inclusion criteria & grouping for synthesis
- Searching & selecting studies
- Collecting data
- 6. Effect measures
- Bias and conflicts of interest
- 8. Risk of bias in randomized trials
- 9. Preparing for synthesis

#### Part 3: Specific perspectives in reviews

- 16. Equity
- 17. Intervention complexity
- 18. Patient-reported outcomes
- 19. Adverse effects
- 20. Economic evidence
- 21. Qualitative evidence

#### Part 4: Other topics

- 22. Prospective approaches
- 23. Variants on randomized trials
- 24. Including non-randomized studies
- 25. Risk of bias in non-randomized studies
- 26. Individual participant data



# Medical Library Association: Professional Competencies (2017)

⇒ Finds published and unpublished studies for complex reviews.

Basic: Describes systematic review standards and guidelines; searches relevant subject-specific databases and other sources.

Expert: Filters results using predefined eligibility criteria; organizes and distributes results; documents search strategies and procedures for publication.

#### 4.2 General issues #section-4-2

4.2.1 Role of the information specialist/librarian #section-4-2-1

Medical/healthcare librarians and information specialists have an integral role in the production of Cochrane Reviews. There is increasing evidence of the involvement of information specialists in systematic reviews (Spencer and Eldredge 2018) and evidence to support the improvement in the quality of various aspects of the search process (Rethlefsen et al 2015, Meert et al 2016, Metzendorf 2016, Aamodt et al 2019).

### **Standards for the CONDUCT of new Cochrane Intervention Reviews (C1-C75)** MECIR Standards for the Co

Item No.	Status	Item name	Standard	Rationale and elaboration	Resources (Handbook)
	重要性				對應手冊
	Searching f	or studies			
C24	Mandatory	Searching key databases	Search the Cochrane Review Group's  SPLIE BY CE  externally via CENTRAL). Ensure that  CENTRAL, MEDLINE (e.g. via PubMed)  and Embase, if it is available to either the  CRG or the review author, have been  searched (either for the review or for the  Review Group's Specialized Register).	Searches for studies should be as extensive as possible in order to reduce the risk process. The process of the reduced the risk process of the reduced the risk process. The process of the reviews in this way, central, MEDLINE, and Embase (if available to the CRG or the review author). Expertise may be required to avoid unnecessary duplication of effort. Some, but not all, reports of eligible studies from MEDLINE, Embase and the Cochrane Review Groups' Specialized Registers are already included in CENTRAL. Supplementary searches should be performed as described in sections 6.3.2 and 6.3.3 of the Cochrane Handbook.	
C25	Highly desirable	Searching specialist liographic labases	Search appropriate national, regional and subject specific bibliographic databases. 搜尋國家、區域、主	Searches for studies should be as extensive as possible in order to reduce the risk of publication bias and to identify as much relevant evidence as possible.  The property of the publication bias and to identify as much relevant evidence as possible.  The property of the publication of the public	
C26	Mandatory	erching for liverent types of evidence	If the review has specific eligibility criteria around study design to address adverse eft 搜尋不同研究類型的address them.	Sometimes different searches will be conducted for different types of evidence, such as for non-randomized studies for addressing adverse effects, or for 1證據《副作用》、經濟評估)	
C27	Mandatory	Searching trials	Search trials registers and repositories of re提票監禁試驗登記(Clinical Thank Registry Platform (ICTRP) portal and other sources as appropriate.	Searches for studies should be as extensive as possible in order to reduce the risk of publication plas and to identify as much relevant evidence as possible. Although the WHO ICTRP portal, it is recommended that both pincal Trials.gov and the ICTRP portal are searched separately due to additional features in ClinicalTrials.gov.	
C28	Highly desirable	Searching for grey literature	Search relevant grey literature sources su搜尋灰色文獻。(報告	Searches for studies should be as extensive as possible in order to reduce the risk of 學位論文 to id 會議摘要) Intervidence as possible.	
C29	Highly desirable	Searching within other reviews	<sup>S</sup> :搜尋相同主題的評論	tudies should be as extensive as possible in order to reduce the risk and to identify as much relevant evidence as possible.	
C30	Mandatory	Searching reference lists	Check reference lists in included studies id 確認納入研究和相關	Searches for studies should be as extensive as possible in order to reduce the risk of publication bias and to identify as much relevant widences has been a like as a possible of publication bias and to identify as much relevant widences has been a like as a like as a possible of the risk of publication bias and to identify as much relevant widences have a like as a possible in order to reduce the risk of publication bias and to identify as much relevant widences have a like as a like as a possible in order to reduce the risk of publication bias and to identify as much relevant widences have a like as a like	#

C31	Highly desirable	contacting relevant individuals and organisations  organisations for information about with 緊相關個人或機構		Searches for studies should be as extensive as possible in order to reduce the risk of publication bias and to identify as much relevant evidence as possible. It is 構以取得某出版或進行中研究 is later updated these					
C32	Mandatory	Structuring search strategies for bibliographic databases	Inform the structure of search strategies in bibliographic databases around the main concepts of the review, using appropriate elements from PICO and study design. In strate the search of the AND and OR or end of the AND	Inappropriate or inadequate search strategies may fail to identify records that are included in bibliographic databases. Expertise may need to be sought, in particular from the Cochrane Review Group's Trials Search Coordinator. The structure of a search strategy should be based on the main concepts being examined in a review peneral databases, such as MEDLINE, a search strategy to identify a Cochrane Review will typically have three sets of terms: 1) terms to search for the health condition of interest, i.e. the population; 2) terms to search for intervention(s) evaluated; and 3) terms to search for the types of study design to be included (typically a 'filter' for randomized trials). There are exceptions, however. For instance, for reviews of complex interventions, it may be necessary to search only for the population or the intervention. Within each concept, terms are joined together with the Boolean 'OR' operator, and the concepts are combined with the Boolean 'AND' operator. The 'NOT' operator should be avoided where possible to avoid the danger of inadvertently removing from the search set records that are relevant.					
C33		Developing search strategies for bibliographic abases	Identify appropriate controlled vocabulary (e.g. MeSH, Emtree, including 'exploded'  Terms	Inappropriate or inadequate search strategies may fail to identify records that are included in bibliographic databases. Search strategies need to be customized for each database. It is important that MeSH terms are 'exploded' wherever appropriate, in order not to miss relevant articles. The same principle applies to EMTREE when searching EMBASE and also to a number of other databases. The example of the cabulate of the control of the co					
C34	Highly desirable	Using search	Use specially designed and tested search filters where appropriate including the Cochrane Highly Sensitive Search Strategies for identifying randomized trials in MEDLINE, but do not use filters in pre-	Inappropriate or inadequate search strategies may fail to identify records that are included in bibliographic databases. Search filters should be used with caution. They should be assessed not only for the reliability of their development and reported performance but also for their current accuracy, relevance and effectiveness given the frequent interface and indexing changes affecting of the contract of the co					
C35	Mandatory	Restricting database searches	Justify the use of any restrictions in the search strategy on publication date or publication format.	Date restrictions in the search should only be used when there are date restrictions in the eligibility criteria for studies. They should be applied only if it is known that relevant studies could only have been reported during a specific time period, for example if the intervention was only available after certain time point. Searches the intervention was only available after certain time point. Searches e of entry into the database rather than date or publication to avoid duplication of effort. Publication format restrictions (e.g. exclusion of letters) should generally not be used in Cochrane reviews, since any information about an eligible study may be of value.					
C36	Mandatory	Documenting the search process	Document the search process in enough detail 整紀錄搜尋過程,	The search process (including the sources searched, when, by whom, and using what the process to the decumentary of the review, to the extent that all the searches of all the databases are reproducible.					
C37	Mandatory	Rerunning searches	Rerun or update searches for all relevant databases within 12 months before pulos 表前重新或更新搜studies.	The published review should be as up to date as possible. The search must be rerun close to publication, if the initial search date is more than 12 months (rably 6 months) from the intended publication date, and the results screened tentially eligible studies. Ideally the studies should be fully incorporated. If not, then the potentially eligible studies will need to be reported, at a minimum reference under 'Studies awaiting classification' or 'Ongoing studies'.					

http://editorialunit.cochrane.org/mecir

SR標準

### PRISMA 2020 Statement

Preferred Reporting Items for Systematic Reviews and Meta-analyses

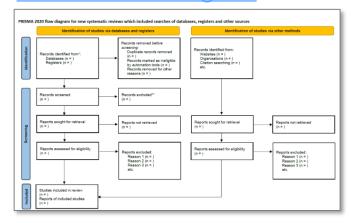


- 作者
- 期刊編輯、同儕審查
- 讀者

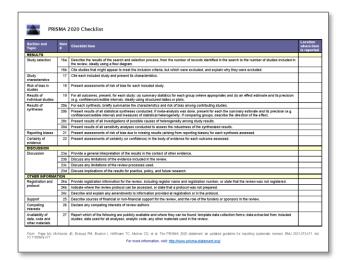


促進系統性文獻回顧之研究 與撰寫的品質,使進行過程 能透明與完整地被報告

#### PRISMA Flow Diagram



#### **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 Checklist**

文獻搜尋與篩選相關的4個檢核項目

Topic	;	# Check item	Location where item is reported
METHODS			
Information sources 資訊來源	6	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.	p.xx line xx
Search strategy 檢索策略	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	suppl.x
Selection process 篩選過程	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 selection	16 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.	
研究篩選	16 b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	

### 撰寫 #6 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 Searches**

The conduct of this systematic review complied with the PRISMA Statement to ensure transparent and complete reporting. Seven databases were searched for relevant randomized controlled trials (RCTs), from their inception dates to August 2019: MEDLINE (through the Ovid interface, including epub ahead of print, in-process, and other nonindexed citations), Embase, Cochrane CENTRAL, Scopus, and World Health Organization International Clinical Trials Registry Platform (ICTRP), CNKI (China National Knowledge Infrastructure), and Wanfang Med Online. The reference lists of eligible articles were reviewed to identify additional studies for possible inclusion. We also established e-mail alerts to identify newly released studies from the different databases, which fell within the scope of our review.

檢索日期起訖 資料庫+介面 試驗註冊/未出版

引用(與被引)檢索-Scopus

新文通報 或 更新檢索

#### Study and data extraction

A total of 612 potential articles were identified from the seven databases.... For studies with <u>only conference abstracts available</u>, we contacted the authors to confirm the complete data....

#繫作者

# 撰寫 #7 Search Strategy

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

#### **Methods**

#### Data sources and search strategy

. . . . . . .

The key concepts – hot flush, menopause symptoms, breast cancer, and acupuncture – used in the search included their 78 synonyms in total and controlled vocabulary (12 Emtree terms, 11 MeSH terms, etc.). We applied highly sensitive search filters to identify RCTs. The supplementary online appendix 1 displays the full search strategy.

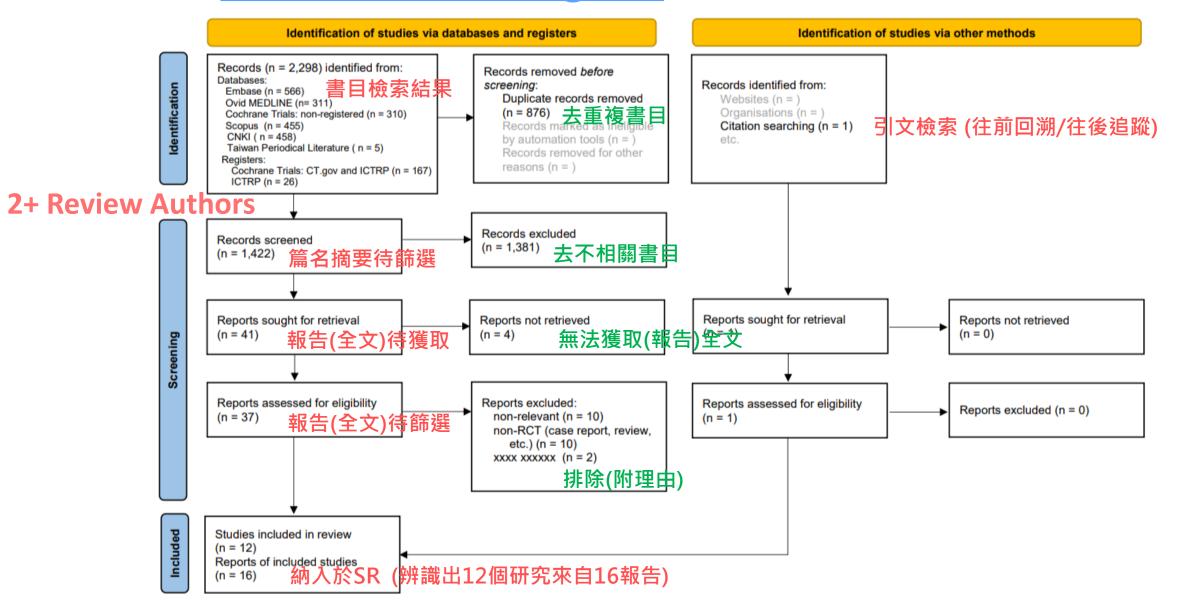
#### 進階

- PRESS Peer Review of Electronic Search Strategies
- PRISMA for Searching (Checklist)

appendix 1

	Database	#	Search syntax	Citations found					
	1)	1	"hot flush"/exp OR "vasomotor disorder"/exp OR "night sweat"/exp						
	Embase	2	(flush* OR ((hot OR night* OR nocturnal*) NEAR/5 (flash* OR sweat*)) OR vasomotor):ti,ab,kw,de						
ŧ	詞彙	3	"menopause and climacterium"/exp OR "menopause related disorder"/de OR "menopausal syndrome"/exp OR "premature ovarian failure"/exp OR "anovulation"/exp						
ſ	司義詞	4	(climacter* OR menopaus* OR premenopaus* OR perimenopaus* OR postmenopaus* OR pre-menopaus* OR peri-menopaus* OR post-menopaus* OR (mens NEAR/3 cessat*) OR (ovarian NEAR/3 (fail* OR cessat* OR absen*)) OR anovulation*):ti,ab,kw,de						
		5	"breast tumor"/exp						
		6	((breast OR mamma*) NEAR/11 (cancer* OR neopla* OR adenocarcin* OR carcin* OR tumor* OR tumour* OR malignan* OR sarcoma* OR mass* OR DCIS OR ductal* OR infiltrat* OR intraductal* OR lobula* OR medullary)):ti,ab,kw,de						
		7	"acupuncture"/exp OR "transcutaneous nerve stimulation"/exp OR "moxibustion"/exp						
		8	(acupunctur* OR acupress* OR acupoint* OR electroacupunctur* OR "Zhen Jiu"  OR ZhenJiu 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) NEAR/4 (stimulat* OR electrostimulat* OR neurostimulat*))):ti,ab,kw,de						
┥		9	(#1 OR #2 OR #3 OR #4) AND (#5 OR #6) AND (#7 OR #8) AND [embase]/lim	357					
		10	#9 AND ("crossover procedure":de OR "double-blind procedure":de OR "randomized controlled trial":de OR "single-blind procedure":de OR (random* OR factorial* OR crossover* OR cross NEXT/1 over* OR placebo* OR doubl* NEAR/1 blind* OR singl* NEAR/1 blind* OR assign* OR allocat* OR volunteer*):de,ab,ti)	RCTs: 168					
İ	2)	1	exp Hot Flashes/ OR exp Vasomotor System/ OR exp Sweating/						
	MEDLINE (Ovid)	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						

### **PRISMA Flow Diagram**



# SR課程與教案

#### 圖書館課程 OR 微學分加選

# 系統性回顧研究

Systematic Review 是一種研究方法,借鏡實證醫學領域裡證據等級最高的研究設計,遵循嚴謹的研究準則-擬定問題、搜尋文獻,並由作者本人及另一位合著者分別篩選出相關原始研究、彙整雙方所納入研究並達成共識,總評研究證據與實務建議。(若可擷取量化數據即做統合分析)

#### SR 重視全面研究證據的獲取:

透過系統性的方法完整搜尋文獻,避免遺漏潛在文獻,以求降低研究偏差。

#### ₹ 課程特色

- 實用教材掌握文獻搜尋技巧
- 每月定期課程10小時
- 核心課程5小時取得研習證書 (半年內集滿即可)
- 同步+非同步課程,根據自我研究進度反覆學習

聯絡我們: medref@libmail.lib.ncku.edu.tw

Source: https://www.canva.com/

#### 適合對象

- Systematic Review /
  Scoping Review 各領域研究者

課程資訊 課程報名 掃描QR Code











報名人數若不足5人,將通知取消開課

深度諮詢

# 從基礎到進階

	簡配			大全配
定期/單位	資料庫介紹	搜尋技巧/策略	PICO解析	參考文獻管理軟體
<b>通</b> 識	<ul><li>常用資料庫</li><li>收錄範圍</li><li>檢索介面</li><li>儲存與輸出</li></ul>	<ul><li>AND / OR</li><li>片語</li><li>切截字</li><li>限定欄位</li></ul>	<ul><li>PICO架構 (量化/質性)</li><li>問題類型 (Dx, Tx)</li></ul>	<ul><li> 匯入書目</li><li> 找全文</li><li> 去重複</li></ul>
	<ul><li>檢索詞的搜尋 (同義詞與控制詞彙)</li><li>適當檢索介面</li><li>研究設計篩選器</li></ul>	<ul><li>鄰近字查詢</li><li>搜尋語法禁忌</li><li>"cardio* disease*"</li></ul>	• 檢索詞的蒐集 (同義詞與控制詞彙)	• 改條件去重複
家教	• 專科資料庫 • 平台強弱項	・搜尋策略評估 ・搜尋結果收放 (精準 vs 完整)	<ul><li>檢索詞完整性</li><li>PICOS適當性</li><li>Study Designs Filters 適用性</li></ul>	• SR篩選流程管理

32

## 教學配方

[SR2] EndNote for SR (3時)

簡配

大全配

定期/單位

通識

[SR0] 資訊力暖身操 (2時) 資料庫介紹

- 常用資料庫
- 收錄範圍
- 檢索介面
- 儲存與輸出
- · 檢索詞的搜尋 (同義詞與控制詞彙)
- 適當檢索介面
- 研究設計篩選器

#### 搜尋技巧/策略

- AND / OR
- 片語
- 切截字
- 限定欄位
- 鄰近字查詢
- 搜尋語法禁忌

"cardiov\* diseas

#### PICO解析

- PICO架構 (量化/質性)
- 問題類型 (Dx, Tx...)

[SR1a] SR文獻搜尋課程

(3時)

檢索詞的蒐集 (同義詞與控制詞彙 參考文獻管理軟體

- 匯入書目
- 找全文
- 去重複

· 改條件去重複

• 專科資料庫

• 平台強弱項

- 搜尋策略評估
- 搜尋結果收放

準 vs 完整)

[SR1b] SR文獻搜尋諮詢 (2時)

- **6略評估** 檢索詞完整性
  - PICOS 適當性
  - <u>S</u>tudy Designs Filters 適用性

• SR篩選流程管理

家教

深度諮詢

33



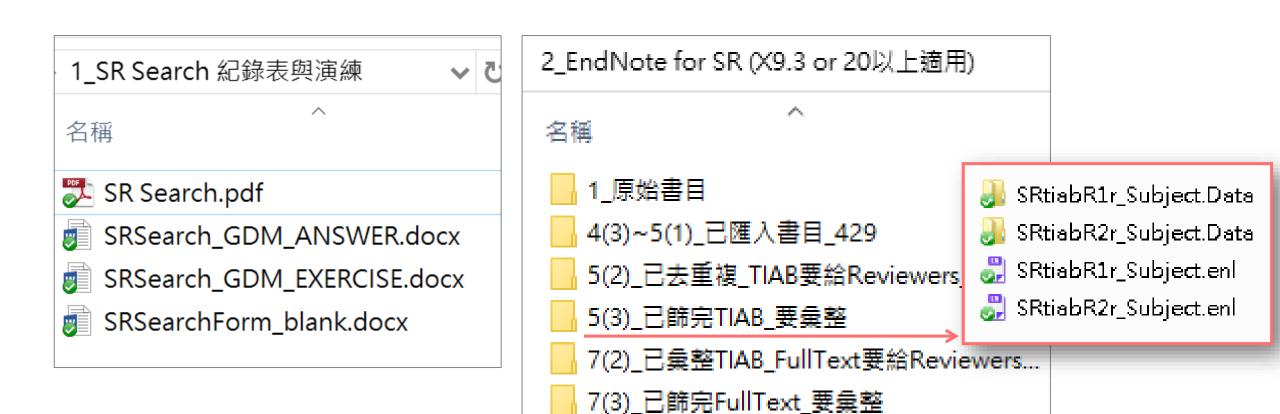
### 2022 First Half-Year (English-Taught 英文授課)



June

July

# 教材檔案



8\_已彙整FullText\_進入文獻評讀\_11

🔁 EndNote for SR 20220407.pdf

# 搜尋紀錄表

**p.**1

#### 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:	
<b>P</b> opulation	
Intervention	
Comparison	
Outcome	
Type of Question/	
Publication Type	

#### 2. 檢索詞 Search Terms

	中文同義字 Chinese Synonyms	英文同義字	控制詞彙 Emtree / MeSH Controlled Vocabulary
	Chinese Synonymis	English Synonyms	Controlled Vocabulary
P			
1			
С			
o			
L			

其他限制 Limits: (除非特殊原因,否則避免語言與年代等限制)

註 1: 控制詞彙縮格表示廣狹義關係·使用廣義字檢索預設會包含狹義字。其他資料庫之控制詞彙請表達在第 4 項搜尋策略即可。

# 搜尋紀錄表

**p.2** 

#### 3. 搜尋資料庫 Searched Databases

	新		書目紀錄筆數 Citations							
資料庫 Database	文通 知 Alert	搜尋日期 Date searched	搜尋結果 Records identified through database searching	篇名摘 Record duplicates	複 <b>後 /</b> 要待篩 ds after removed / screened	assess	articles ed for	納入質性綜 Studies included qualitative synthesis		納入統合分析 Studies included in quantitative synthesis
1) Embase										
2) MEDLINE	2) MEDLINE									
3) CENTRAL										
4)										
5)										
additional sources	additional sources									
文獻篩選流程 PRISMA flow diagram:		included:	included:		included:		included:		included:	
人為的超無性 <u>PRISIVIA NOW diagram</u> .			de-duplicate	de-duplicates: exclu		l		xcluded: 月排除理由	È	excluded: 說明排除理由

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

註 3: 重複排除與篩選流程管理·可利用相關軟體·例如 EndNote (for SR 教材下載後須解壓縮)

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。

#### 4. 搜尋策略 Search Strategy (投稿時附上此項為 Appendix )

資料庫 Database	#	搜尋語法 Search syntax	結果筆數 Citations found
1)	1	Joan St. Syllian	Side at Silvering
Embase	2		
	3		
	4		
	5		
	6		
	7		

## 搜尋紀錄表: 語法小抄

成大醫圖最近確認日期: 2021.11.9,檢索時請確認有效性

### 附錄 1

語法	PubMed	OVID	Embase	EBSCOhost (註1)	Cochrane L	WoS	Scopus
切截字 (多字元)	combin* 可: "drug combin*" 不: "drug* combin*"	combin* an*emia* (\$亦可)	combin* an*emia*	combin*	combin* an*emia *glip*tin*	combin* an*emia *glip*tin*	combin* an*emia *glip*tin*
切截字 (單字元)		combine? g?rd ? 0/1字元; # 1字元	combine? g?rd ? 1字元; \$ 0/1字元	combine? g?rd ? 1字元; \$ 0/1字元	combine? g?rd ?lide ? 01字元	combine? g?rd ?lide ?1字元;\$0/1字元	combine? g?rd ?lide ? 1字元
精確片語 (採直引號)	"high dose"	"high dose"	"high dose" 單引號可	"high dose"	"high dose"	"high dose"	"high dose"
鄰近字 (有次序)			high <b>next/3</b> dose 隔2單字內	high <b>w2</b> dose 隔2	high <b>next/2</b> dose 隔2		high <b>pre/2</b> dose 隔2
鄰近字 (無次序)		high <b>adj3</b> dose 隔2單字內	high <b>near/3</b> dose 隔2	high <b>n2</b> dose 隔2	high <b>near/2</b> dose 隔2	high <b>near/2</b> dose 隔2	high <mark>w/2</mark> dose 隔2
交集	AND (大寫)	and (大小寫)	and	and	and	and	and
聯集	OR	or	or	or	or	or	or
差集	NOT	not	not	not	not	not	and not
檢索集組合	#1 AND #2	1 and 2	#1 and #2	s1 and s2	#1 and #2	#1 and #2	#1 and #2
free-text	pain[tw] OR ache[tw]	(pain or ache).mp	("sore throat" or pain):ti,ab,kw,de	pain or ache (預設文字欄位)			title-abs-key (pain or ache)
欄位 (第1行結果 稍大於第2行)	pain <b>[tiab]</b> OR ache <b>[tiab]</b> 逐一附加	(pain or ache). <b>ti,ab,kf</b> 整串或逐一附加 (右欄同)	("sore throat" OR pain): <b>ti,ab,kw</b> 片語引號必須	ti (pain or ache) OR ab (pain or ache)	(pain or ache):ti,ab,kw	ts=(pain or ache)	title-abs (pain or ache) OR authkey (pain or ache)
controlled vocabulary	"pain"[mh]	exp "pain"/	"pain" <mark>/exp</mark>	mh ("pain+" OR "pain management+")	[mh "pain"]	-	-
欄位	"pain"[mh:noexp]	"pain"/	"pain"/de	mh ("pain" OR	[mh ^"pain"]		
	逐一附加	逐一附加	逐一附加 片語引號必須	"pain management") 整串或逐一附加; (註1)	逐一附加;不可大寫 片語引號必須		
subheading	surgery[sh]	su.xs	surgery:Ink			-	-
subfleading	surgery[sh:noexp]	su.fs		mw "SU"	[mh /SU]		

### 搜尋紀錄表: 研究設計篩選

**附錄 2-1: RCT Filters** (CENTRAL 即收錄 RCT,無須套用 Filter。不同問題類型/研究設計、資料庫/平台,套用的 Filters 各異,如有需要請洽詢; 紅字是有異於原始 Filter)

Embase [Elsevier]	Medline [Ovid]	Medline [PubMed]	CINAHL [EBSCOhost]	PsycInfo [EBSCOhost]	Web of Science
("randomized controlled trial"/de or "controlled clinical trial"/de or "randomization"/de or "intermethod comparison"/de or "double blind procedure"/de or "human experiment"/de OR (random* or placebo or assigned or allocated or volunteer or volunteers or (open NEXT/1 label) or ((double or single or doubly or singly) NEXT/1 (blind or blinded or blindly)) or "parallel group?" or crossover or "cross over" or ((assign* or match or matched or allocation) NEAR/5 (alternate or group? or intervention? or patient? or subject? or participant?)) OR (controlled NEAR/7 (study or design or trial))):ti,ab OR (compare or compared or comparison or trial):ti OR ((evaluated or evaluate or evaluating or assessed or assess) and (compare or compared or comparing or comparison)):ab) NOT (((random* NEXT/1 sampl* NEAR/7 ("cross section*" or questionnaire? or survey* or database?)):ti,ab not ("comparative study"/de or "controlled study"/de or "randomi?ed controlled":ti,ab or "randomi?ed controlled trial"/de or "controlled clinical study"/de or "controlled study"/de or "randomi?ed controlled; ti,ab or "control	sensitivity-maximizing (優先採用): (randomized controlled trial.pt. or controlled clinical trial.pt. or randomi*ed.ab. or placebo.ab. or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab. not (exp animals/ not humans.sh.))  Filter Source: Box 3.c, Technical Supplement to Chapter 4. Searching for and Selecting Studies, Cochrane Handbook for Systematic Reviews of Interventions Version 6. (Add: randomized.ab)  sensitivity- and precision- maximizing (折衷採用): (randomized controlled trial.pt. or controlled clinical trial.pt. or randomized.ab. or randomised.ab. or placebo.ab. or clinical trials as topic.sh. or randomly.ab. or trial.ti. NOT (exp animals/ not humans.sh.))	r (randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomized[tiab] OR placebo[tiab] OR drug therapy[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab] NOT (animals [mh] NOT humans [mh]))  Fiter Source: Box 3.a, Technical Supplement to Chapter 4. Searching for and Selecting Studies. Cochrane Handbook for Systematic Reviews of Interventions Version. 6. (Add: randomized[tiab])  sensitivity- and precision-maximizing (折衷採用): (randomized controlled trial[pt] OR controlled clinical trial[pt] OR	(MH ("randomized controlled trials" OR "double-blind studies" OR "single-blind studies" OR "random assignment" OR "pretest-posttest design" OR "cluster sample") OR TI (randomised OR randomized) OR AB (random*) OR TI (trial) OR (MH (sample size) AND AB (assigned OR allocated OR control)) OR MH (placebos) OR PT (randomized controlled trial) OR AB (control W5 group) OR MH ("crossover design" OR "comparative studies") OR AB (cluster W3 RCT)) NOT ((MH ("animals+" OR "animal studies") OR TI (animal model*)) NOT MH (human))  Fitter Source: Box 3.f., Technikal Supplement to Chapter 4: Searching for and Selecting Studies. Cochrane Handbook for Systematic Reviews of Interventions Version 6.	Watson et al:  DE "Treatment Effectiveness Evaluation" OR DE "Treatment Outcomes" OR DE "Psychotherapeutic Outcomes" OR DE "Psychotherapeutic Outcomes" OR DE "Roleobo" OR DE "Followup Studies" OR placebo* OR Paradom* OR Pcomparative stud** OR (clinical Natirist)* OR (research Na design) OR (evaluat* N3 stud*) OR (prospectiv* N3 stud*) OR (singl* OR doubl** OR trebl* OR trip! N3 (blind* OR mask*)  Filter Source: Watson RJ, Richardson PH. Identifying randomized controlled triabs of cognitive therapy for depression: comparing the efficiency of Embase, Medline and PsycINFO bibliographic databases. Br J Med Psychol. 1999 Dec;72 ( Pt 4):535-42.  Eady et al:  Best senskivity: EBSCOhost 介面無法直接以單一符號表示包含狹義詞,要逐一列出數單太龐大,不推薦使用此語法。Best senskivity: Trandom* assigned* OR control Filter Source: Eady AM, Wilczynski NL, Haynes RB. PsycINFO search strategies identified methodologically sound therapy studies and review articles for use by clinicians and researchers. Journal of Clinical Epidemiology. 2008 Jan;61(1):34-40.  本區參考 Cochrane 推薦之 ProQuest 平台語法,將其修改為 EBSCOhost 平台語法	TS= clinical trial* ORTS=research design ORTS=comparative stud* ORTS=evaluation stud* OR TS=evaluation stud* ORTS=follow-up stud* ORTS=prospective stud* ORTS=random* ORTS=placebo* ORTS=(single blind*) OR TS=(double blind*)  Filter Source: American University of Behut
group?":ti,ab)) OR ((((case NEXT/1 control*) and random*) not randomi?ed		(animals[mh] NOT humans [mh]))  Fiter Source: Box 3.b, Technical Supplement to Chapter 4: Searching for and Selecting Studies. Cochrane		(EBSCOhost)	
controlled):ti,ab) OR ("Systematic review" not (trial or study)):ti OR (nonrandom* not random*):ti,ab OR "Random field*":ti,ab OR ("random cluster" NEAR/3 sampl*):ti,ab OR ((review:ab and review/it) not trial:ti) OR ("we searched":ab and (review:ti or review/it)) OR "update review":ab OR (databases NEAR/4 searched):ab OR ((rat or rats or mouse or mice or swine or procine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset?):ti and "animal experiment"/de) OR ("animal experiment"/de not ("human experiment"/de or "human"/de)))  Fiter Source: Box 3.e, Technical Supplement to Chapter 4. Searching for and Selecting Studies. Cochrane Handbook for Systematic Reviews of Interventions Version 6. (Syntax Translated from Ovid Embase to Elsevier Embase.com.)	Filter Source: Box 3.d, Technical Supplement to Chapter 4. Searching for and Selecting Studies, Cochrane Handbook for Systematic Reviews of Interventions Version 6. (Add: randomised.ab)	Handbook for Systematic Reviews of Interventions Version 6. (Add: randomized[tab])		(DE "TREATMENT effectiveness" OR DE "TREATMENT failure" OR DE "HEALTH outcome assessment" OR DE "OUTCOME assessment of adolescent psychotherapy" OR DE "PLACEBOS" OR DE "FOLLOW-up studies (Medicine)" OR placebo* OR random* OR "comparative stud*" OR (clinical N3 trial*) OR (research N3 design) OR (evaluat* N3 stud*) OR (prospectiv* N3 stud*) OR ((singl* OR doubl* OR treb!* OR tripl*) N3 (blind* OR mask*!))  Filter Source: Identifying RCTs in PsycINFO. Search strategy, amended to ProQuest format. Cochrane Work. ((Syntax Translated from ProQuest PyscINFO to EBSCOhost PBSC)	(INDEXTERMS ("clinical trials" OR "clinical trials as a topic." OR "randomized controlled trial" OR "Randomized Controlled Trials as Topic." OR "controlled Clinical trial" OR "controlled Clinical trial" OR "controlled Clinical trial" OR "sendomized Controlled Trials as Topic." OR "souther-Bind Method" OR "Single-Bind Method" OR "Single-Bind Method" OR "Single-Bind Method" OR "Single-Bind Procedure" OR "crossover procedure" OF "clinical trial" OR "controlled study" OR "randomizetion" OR "placebo") JOR (TITLE-ABS-KEY ("clinical trial" OR "Controlled Trials OR "clinical trial" OR "Randomized Controlled Trials as Topic" OR "controlled Clinical trial" OR "Controlled Clinical trial" OR "Controlled Clinical trial" OR "Controlled Clinical trial" OR "Controlled Clinical trial OR "Randomized Controlled Clinical Trials as Topic." OR "Controlled Clinical trial OR "Controlled Clinical trial" OR "Randomized OR "Blocated andomy" OR "Double-Bind" Method" OR "Cross-Over Studies" OR "Placebos" OR "Tractorial design" OR "Actorial trial" J) JOR (TITLE (clinical trial OR trial OR rctr' OR random "OR Dilind")  Filter Source: This filter is built by NUS Medical Library using MESH and EMTREE terms as Index terms and Keywords. Useful to search in Scopus for RCTS.

## Embase 舉一反三

步驟	Embase	>> Ovid Medline	>> PubMed	>>>CENTRAL
型 控制 詞彙 對應	"physical activity"/exp OR "exercise"/exp OR "kinesiotherapy"/exp	<pre>exp "Exercise"/ OR exp "Exercise Therapy"/</pre>	Exercise [mh] OR Exercise Therapy[mh]	[mh "Exercise"] OR [mh "Exercise Therapy"] 在Search Manager介面執行
② <b>檢索</b> 語法 轉	(exercise* OR kinesio*):ti,ab,kw,de	(exercise* OR kinesio*).mp	exercuse <b>*[tw]</b> OR kinesio* <b>[tw]</b>	(exercise* OR kinesio*):ti,ab,kw
③ Filter 套用 study type: RCT	#12 AND ("randomized controlled trial"/de or "controlled clinical trial"/de or "randomization"/de or "intermethod comparison"/de or "double blind procedure"/de or "human experiment"/de OR (random* or placebo or assigned or allocated or volunteer or volunteers)	12 AND ((randomized controlled trial.pt. or controlled clinical trial.pt. or randomized.ab. or randomised.ab. or placebo.ab. or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab.) not (exp animals/ not humans.sh.))	#12 AND ((randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomised[tiab] OR placebo[tiab] OR drug therapy[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab]) NOT (animals [mh] NOT humans [mh]))	N/A

## 教案提升教/學效果

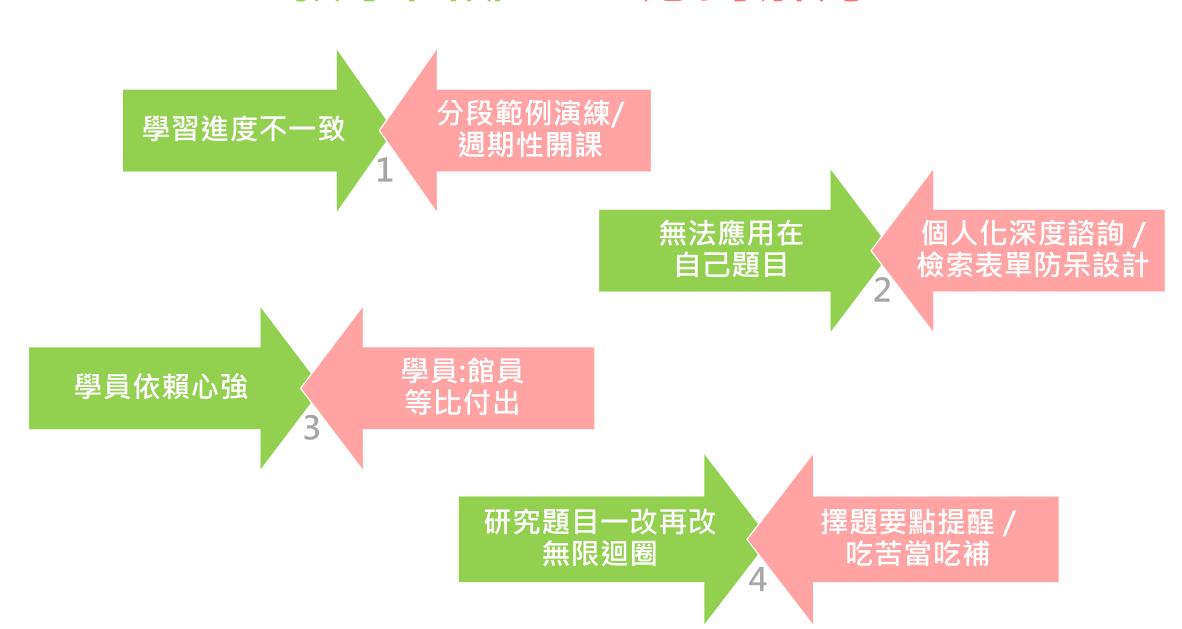
- 遵循標準: Cochrane Handbook, MECIR, PRISMA #說服力
- 結構化檢索策略的設計 #可重複性
- 漸進式建構檢索策略 #分階性
- 附錄小抄 #易套用



- 範例練習 vs. 解答
- #供自理

Checklist

#### 教學困難 vs. 應對解方



## SR服務發展的血與淚

回首來時路

#### 馬偕

## 弋檢

2010



教材beta

開講

2012-14

北慈課程 3h\*4次

身為研究者



合作

研究

2013

成大

教材1.0

演講

2015

家醫部



教材2.0

**EBM** 

年會

2018



教材3.0

醫圖

學會

2019



教案1.0

定期 課程

2020

每月8時

中英/證書

量質研究

新血

全校

推廣



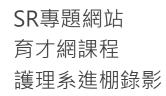
2021

現在與未來

每月12時

- +SR0 資訊暖身操 (知服組)
- +SR1a 非醫 (跨領域)

行政業務研究 微學分





(與課程互相支撐/分流)

61

## SR專頁+研究資源指引



成大圖書館一系統性文獻回顧研究

首頁 SR簡介 文獻搜尋課程

成大著作

線上諮詢 (Webex)

相關資源 ~

English



#### SR研究簡介



- 借鏡實證醫學領域裡證據等級最高的研究設計,遵循嚴謹研究準則一擬定問 題、搜尋文獻,由作者本人及另一位合著者分別篩選出相關原始研究、彙整 雙方所納入研究並達成共識,總評研究證據與實務建議。(若可擷取量化數 據即做統合分析)
- 透過系統性的方法完整搜尋文獻,避免遺漏潛在文獻,以求降低研究偏差。 除了是SR的研究方法,也是Scoping Review、Clinical Practice Guideline 的必要方法。



#### SR文獻搜尋課程

■ 實用教材掌握文獻搜尋技巧與篩選流程管理

課程報名網站



# 圖書館(員)在在SR

- 課程支持
- 諮詢支持
- 成為SR合著作者
- 名列致謝

• 自我感覺良好



icons created by Flat Icons - Flaticon

## 課程支持

推全校 (+非醫領域)

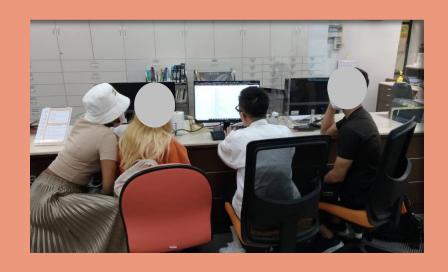
每月開課

預約為主、英語up

年	2021		2020		2019	
	堂	人次	堂	人次	堂	人次
總計	197 堂	1,469 人	133 堂	631人	117 堂	393 人
SR0 暖身操 (2hr)	24	396	_	-	-	_
SR1a 醫學 (3hr)	23	304	26	301	21	209
SR1a 非醫 (3hr)	20	209	_	-	-	_
SR1b 演練 (2hr)	21	223	20	116	-	-
SR2 EN (3hr)	19	210	20	138	18	97
SR 個別指導	90堂137節	127 人	67堂97節	76 人	78堂127節	87 人

## 諮詢支持

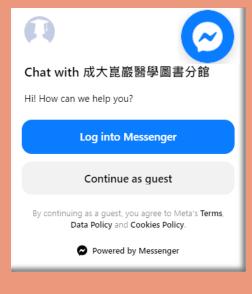




#### 研究日常・最美的對話在醫圖







50

40

30

20

10

2014

2015

## 成為SR合著作者

2019

2018

2020

2021

#### 學術影響力指標

數據更新日期: 2021/5/29

WOS文章篇數

H-Index

代表至少有7篇文

篇均被引用次數

9.33

WoS & **InCites** 

> **CNCI** (2014-2020)

學科正規化影響指數,研究者 表現接近全球平均水準 (CNCI=1,等同全球平均水準)

章被引用7次以上

**Citation Percentile** 

歷年文章被引用次數與同 領域/同期/同文章類型的 文章相較,位居第61個 百分位數,表現優於61% 的其他研究

SciVal

1.28

領域權重影響指數,研究者 表現高於全球平均水準28% (FWCI=1,等同全球平均水準)

#### 出版論文數 一被引用次數

2017

2016

歷年出版論文與被引用次數

## 成為合著作者 (著作清單及學術影響力指標, p.1)

數據更新日期:2021/5/29

		Web of Science & InCites				SciVal
No	文章篇名	期 刊 名 稱 Impact Factor (JCR Quartile)	被引次數	CNCI	Citation Percentile	FWCI
2021	Intravenous infusion of lidocaine for bowel function recovery after major colorectal surgery: a critical appraisal through updated meta- analysis, trial sequential analysis, certainty of evidence, and meta- regression (利多卡因於大腸術後腸胃功能恢復)	Frontiers in Medicine	-	-	-	-
2021	Effect of Vitamin B2 supplementation on migraine prophylaxis: a systematic review and meta-analysis (維他命B於偏頭痛)	Nutr Neurosci 4.028 (Q2)	0	0	-	-
2021	Effect of music therapy on improving sleep quality in older adults: A systematic review and meta-analysis (音樂治療於老人睡眠)	J Am Geriatr Soc 4.180 (Q1)	0	0	-	-
2021	The effects of exercise on chemotherapy-induced peripheral neuropathy symptoms in cancer patients: a systematic review and meta-analysis (運動於化療週邊神經病變)	Support Care Cancer 2.635 (Q1)	0	0	-	-
2021	Effect of earplugs and eye masks on the sleep quality of intensive care unit patients: a systematic review and meta-analysis (耳罩與眼罩於加護病房的睡眠品質)	J Adv Nurs 2.561 (Q1)	0	0	-	-
2020	The maintenance effect of acupuncture on breast cancer-related menopause symptoms: a systematic review (針灸於乳癌更年期症狀)	Climacteric 2.566 (Q2)	0	0	0	0.39
2019	Systematic review with meta-analysis: risk of post-operative complications associated with pre-operative exposure to antitumour necrosis factor agents for Crohn's disease (克隆氏症患者術前接觸腫瘤壞死因子抑制劑與手術後併發症關係)	Aliment Pharmacol Ther 7.515 (Q1)	16	1.85	87	1.80

## 成為合著作者 (著作清單及學術影響力指標, p.2)

數據更新日期:2021/5/29

	文章篇名	Web of Science & InCites				SciVal
No		期 刊 名 稱 Impact Factor (JCR Quartile)	被引次數	CNCI	Citation Percentile	FWCI
2019	Zinc supplementation in patients with cirrhosis and hepatic encephalopathy: A systematic review and meta-analysis (鋅補充於肝腦病變)	Nutr J 3.359 (Q2)	8	0.75	53	1.21
2019	The efficacy of acupuncture in chemotherapy-induced peripheral neuropathy: Systematic review and meta-analysis (針灸於化療週邊神經病變)	Integr Cancer Ther 2.379 (Q2)	5	0.76	61	1.85
2019	The effect of acupuncture in breast cancer-related lymphoedema (BCRL): A systematic review and meta-analysis (針灸於乳癌淋巴水腫)	Integr Cancer Ther 2.379 (Q2)	7	1.07	73	1.32
2017	Myocardial infarction risk and antipsychotics use revisited: a meta- analysis of 10 observational studies (抗精神病藥對心肌梗塞的風險)	J Psychopharmacol 3.121 (Q2)	9	0.83	61	1.00
2017	Effect of acupuncture on hot flush and menopause symptoms in breast cancer - a systematic review and meta-analysis (針灸於乳癌熱潮紅與更年期症狀)	PLoS ONE 2.740 (Q2)	20	1.46	81	1.34
2015	Acupuncture for treating aromatase inhibitor-related arthralgia in breast cancer: a systematic review and meta-analysis (針灸於化療關節痛)	J Altern Complement Med 2.256 (Q2)	32	1.59	81	1.63
2014	Management of Helicobacter pylori infection after gastric surgery (胃手術後幽門桿菌感染管理)	World J Gastroenterol 3.665 (Q2)	14	0.61	56	1.01

#### 合著貢獻 範例

Shen YC, Chang YH, Fang CJ, Lin YS. Zinc supplementation in patients with cirrhosis and hepatic encephalopathy: a systematic review and meta-analysis. Nutrition Journal. 2019;18(1):34. doi: 10.1186/s12937-019-0461-3.

#### ● 文獻檢索策略發展與執行

#### Methods

#### Data sources and search strategy

A medical librarian (CJ F) at the teaching hospital conducted a comprehensive computerized search of relevant literature in the following electronic databases: MED-LINE, Embase, Cochrane CENTRAL, and Scopus, from inception to December 2018, without publication date or language restrictions. Unpublished articles were identified through searching of the WHO International Clinical Trials Registry Platform (ICTRP). Auto-alerts were established to identify newly released studies. We also hand-searched the reference lists of selected articles to find additional studies. The main keywords used in the search were as follows: hepatic encephalopathy, liver cirrhosis, and zinc, including their controlled vocabularies (MeSH and Emtree terms) and synonyms (text words). Our search terms and strategy were described in Additional file 2.

Database	#	Search syntax	Citations found
1) MEDLINE (Ovid)	1	(encephalopath* OR HE OR MHE OR hyperammonemi* OR hepatocerebral OR hepatocerebral OR hepatocerebral OR chapatored or hepatomacemi* OR cirrho* OR hepatopath* OR ((ammoni* OR hypozincemi* OR hypozincemi*) AND (liver OR hepat*)) OR ((liver OR hepat*) ADJ (disease* OR insufficiency OR fibros* OR failure OR coma* OR stupor*))). mp	
	exp Hepatic Encephalopathy/ OR Liver Diseases/ OR exp Hepatic     Insufficiency/ OR exp Liver Cirrhosis/ OR exp Liver/		
	3	(zinc OR ZN OR zincum).mp.	
	4	exp Zinc/ OR exp Zinc Acetate/ OR exp Zinc Sulfate/ OR exp Zinc Compounds/	
	5	(1 OR 2) AND (3 OR 4)	8154
	6	limit 5 to (meta analysis OR systematic reviews)	SR: 28
	7	5 AND (randomized controlled trial.pt. OR controlled clinical trial.pt. OR randomized ab. OR randomised OR placebo.ab. OR drug therapy.fs. OR randomly.ab. OR trial.ab. OR groups.ab. not (exp animals/ not humans.sh.))	RCT: 530
2) EMBASE	1	(encephalopath* OR HE OR MHE OR hyperammonemi* OR hepatocerebral OR hepatoencephalopath* OR ammonemi* OR	

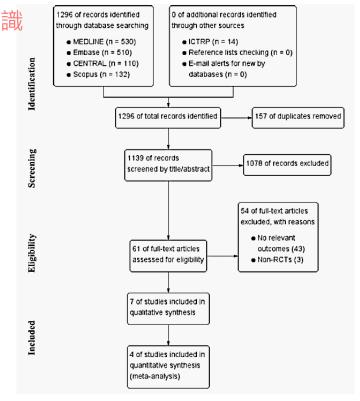
② 文獻篩選流程管理:利用EndNote彙整 兩位Review Authors在各階段的篩選共識

#### Results

Search results

The full details of the search results were summarized in Fig. 1. The initial search algorithm identified 1296 articles;

1139 studies remained after 157 duplicates were removed. Following the screening of titles and abstracts, 1078 studies were eliminated for not meeting the eligibility criteria. A total of 61 studies were retrieved for full-text reviewing; of these, 54 were excluded for not reporting the relevant outcome data or for being non-RCTs. Ultimately, seven studies were identified for the qualitative synthesis [13–15, 17, 26–28]; three studies [15, 26, 27] among those were excluded from the quantitative synthesis because the results were provided as figures only and the primary data could not be obtained.



3 撰寫論文: 負責執行項目的論文寫作,並提交檢索策略做為投稿 附件,以及答覆期刊Peer-Review相關項目提問

#### 名列致謝

參與一項「步行對高血壓影響」研究的中文文獻檢索策略擬定與執行,該研 究於2010年申請Cochrane Protocol研究計畫通過, 歷時10年, 期間更新檢 索三次,最終發表長達254頁的研究論文在系統性文獻回顧研究的最高殿堂 Cochrane Database of Systematic Review • (JCR Impact Factor: 7.890, Q1)



Trusted evidence. Informed decisions



#### Walking for hypertension (Review)

Lee LL, Mulvaney CA, Wong YKY, Chan ESY, Watson MC, Lin HH

Previous studies have found that higher baseline blood pressure ACKNOWLEDGEMENTS was associated with a greater reduction in blood pressure (Lee 2007; Nemoto 2007). Given the similar reduction in BP we saw among normotensive and hypertensive people and the weak association between baseline and change in blood pressure, we

We are extremely grateful to Cochrane Hypertension Managing Editor, Ciprian Jauca, for his consistent support and assistance throughout the whole process of this review; the assistance

Walking for hypertension (Review)

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**Cochrane Database of Systematic Reviews** 

22

from the Cochrane Hypertension Information Specialist, Douglas Salzwedel, for his design and update of the English reference search, and his support in this field; the searches of the English references of Stephen Adams and Chinese ones of Ching-Ju Fang

(方辭如), We would also like to thank the Cochrane Hypertension Group editors for their input; the peer reviewers for their thorough and constructive comments and the Copy Editor, Heather Maxwell, for her effort on the draft of this review.

Lee LL, Mulvaney CA, Wong YK, Chan ESY, Watson MC, Lin HH. Walking for hypertension. Cochrane Database of Systematic Reviews 2021. doi: 10.1002/14651858.CD008823.pub2.

Database: National Digital Library of Theses and Dissertations in Taiwan

Search Date: 18 May 2020

(健走.ti,kw or 健步.ti,kw or 踏步.ti,kw or 快走.ti,kw or 快步.ti,kw or 跑走.ti,kw or 慢走.ti,kw or 慢步.ti,kw or 走路.ti,kw or 步 行.ti,kw or 腳踏.ti,kw or 滑步.ti,kw or 跑步機.ti,kw or 漫步機.ti,kw or 橢圓機.ti,kw or walking.ti,kw or tread\*.ti,kw or "running machine".ti,kw or "running machines".ti,kw or "Pedlar inexpensive ergometer".ti,kw or "elliptical trainer".ti,kw or "elliptical trainers".ti,kw, or stride\*.ti,kw) and (收縮壓.ti,kw,ab or 舒張壓.ti,kw,ab or 血壓.ti,kw,ab or 心跳.ti,kw,ab or 心律.ti,kw,ab or 心 率.ti,kw,ab or 心肺.ti,kw,ab or SBP.ti,kw,ab or DBP.ti,kw,ab or BP.ti,kw,ab or pressure.ti,kw,ab or hypertens\*.ti,kw,ab or antihypertens\*.ti,kw,ab or heart\*.ti,kw,ab or HR.ti,kw,ab or rhythm\*.ti,kw,ab or cardi\*.ti,kw,ab) and (實驗.ti,kw,ab or 試 驗.ti,kw,ab or 隨機.ti,kw,ab or 對照.ti,kw,ab or random\*.ti,kw,ab or controlled.ti,kw,ab or trial.ti,kw,ab)

Database: China National Knowledge Infrastructure (CNKI): Journals, Theses & Dissertations

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(TI=(健走+健步+踏步+快走+快步+跑走+慢走+慢步+走路+步行+腳踏+滑步+跑步機+漫步機+橢圓機+跑台+跑臺+平板+踏車 +walking+ tread+"running machine"+"running machines"+"Pedlar inexpensive ergometer"+"elliptical trainer"+"elliptical trainers"+stride) or KY=(健走+健步+踏步+快走+快步+跑走+慢走+慢步+走路+步行+腳踏+滑步+跑步機+漫步機+橢圓機+跑台 +跑臺+平板+踏車+walking+ tread+treadmill+treadmills+"running machine"+"running machines"+"Pedlar inexpensive ergometer"+"elliptical trainer"+"elliptical trainers"+stride)) and (SU=(收縮壓+舒張壓+血壓+心跳+心律+心率+心肺 +SBP+DBP+BP+pressure+hypertension+hypertensive+antihypertensive+antihypertension+heart+HR+rhythm+rhythms+cardiopu lmonary)) and (SU=(隨機+對照+控制組+random+randomly+randomized+randomised))

(This interface does not support truncation queries)

Database: Wanfang Med Online: Journals, Theses & Dissertations

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((題名=健走 OR 健步 OR 踏步 OR 快走 OR 快步 OR 跑走 OR 慢走 OR 慢步 OR 走路 OR 步行 OR 腳踏 OR 漫步 OR 跑步機 OR 漫步 機 OR 橢圓機 OR 跑台 OR 跑臺 OR 平板 OR 踏車) OR (關键词=健走 OR 健步 OR 踏步 OR 快走 OR 快步 OR 跑走 OR 慢走 OR 慢步 OR 走路 OR 步行 OR 腳踏 OR 滑步 OR 跑步機 OR 漫步機 OR 橢圓機 OR 跑台 OR 跑臺 OR 平板 OR 踏車)) AND (收縮壓 OR 舒張壓 OR 血壓 OR 心跳 OR 心律 OR 心率 OR 心肺) AND (隨機 OR 對照 OR 控制組)

#### 延伸參考: 相關學位論文

醫學圖書館員參與系統性文獻回顧之研究

Medical Librarian Participation in Systematic Reviews

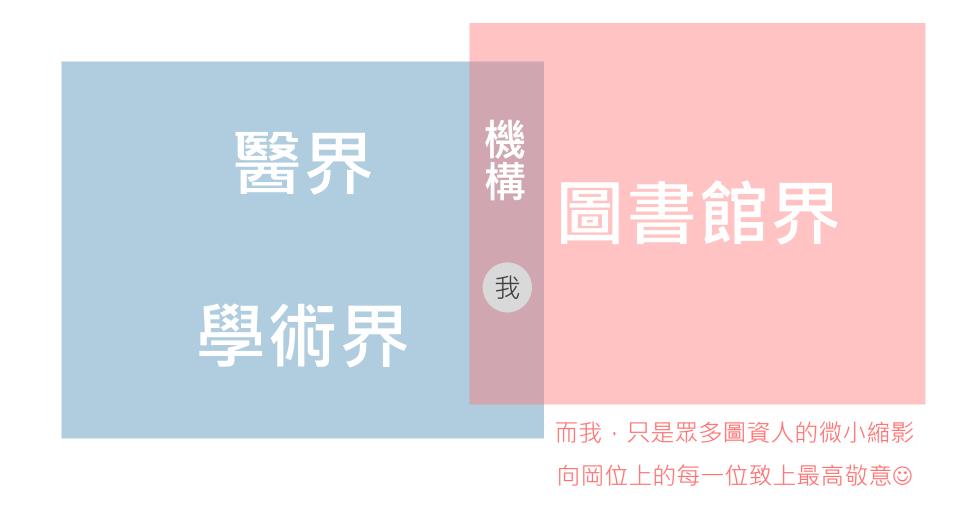
劉淑容,碩士 指導教授:林雯瑤

醫學圖書館員參與系統性文獻回顧:全球引文分析與臺灣發展現況

Medical Librarians Participating in Systematic Reviews: Perspectives of Citation Analysis and In-depth Interview

王衫姍,碩士 指導教授:林雯瑤

#### 圖書館(員)的貢獻與價值



# 自我感覺良好

- ✓ 這是unique課程,外面並沒有見過,尤其圖書館員有能力可以提供專業諮詢,甚至合作研究(醫師)
- ✓ 這對於我的研究很有幫助,包含現在進行的<u>臨床指引</u>製作會用到,但不常用就容易忘記,我想要多參加幾次。(護理部/護理所同學)
- ✓ 很高興能參加這次課程,讓我邁出正式進行文獻回顧正確的第一步。(醫師)
- ✓ 講師非常專業、友善,有"聽君一堂課,勝讀十年書"之感,心存 感激。實作的熱誠已被激發,我會馬上練習,再次謝謝大家。 (校外教師/非醫學領域)
- ✓ 一直很感謝館員總是有耐心與熱心的進行圖書館的推廣事務,尤 其開設許多教育訓練課程,對校園師生的學術發展 有重要的幫助與影響!(校內教師/非醫學領域)
- ✔ 我終於知道唸圖書館系是要做甚麼了! (醫師/碩士生)

## 圖資人的本能

跨域的文獻搜尋能力

這個題目對您來說 會不會太跨領域

> 不會不會~因為每個題 目對我來說都很跨領域 ~根本是門外漢

> 但不用非常理解,也可以有技巧處理:)

## 圖資人的本能

## 跨域的文獻搜尋能力

實際參與過SR就會明瞭, 每個SR主題對館員而言都 是全新的挑戰,優越的檢 索技巧是必備的技能,理 解主題並找出周全關鍵字 才是真功夫,這些都得耗 去挑燈夜戰的時間與精力。 熱情服務的精神,是協助 團隊完成SR發表的(最)重 要支柱。

引用自淡大劉淑容老師通聯記錄