實證醫學競賽

文獻查證 護理部組

三軍總醫院

我們的團隊

簡孟萱護理師

陳冠戎護理師

簡培峯護理師

臨床場景

歷經16小時的奮戰，蔡小姐終於在黎明破曉時，順利產下體重3480克的健康新生兒，母子均安。由於這個寶寶是兩人婚後期待下第一個愛的結晶，產檢過程，夫妻倆就決定哺餵母乳讓寶寶贏在起跑點，待產期間父親均在旁配產，對於孩子的誕生也感到非常興奮及感動。蔡小姐在產房稍作恢復，回到產後病房不久，護理師就將寶寶推到床邊開始進行**親子同室(rooming-in)**，並學習如何**照顧新生兒及哺餵母乳**。

先生問護理師說，「**我老婆吃什麼奶水才會比較多，聽說要多喝魚湯、吃豬腳燉花生，是真的嗎?**」、「我很怕我老婆奶塞住、**乳腺炎**，想要先預防，使用**舒乳棒、或請舒乳師來幫忙按摩、通奶**，不知道有效嗎?我看網路上很多媽媽都推薦吃**卵磷脂(Lecithin)**，不知道要不要先買來吃?」

當天晚上，寶寶幾乎每1至2小時就起來狂哭，餵完奶、安撫好久，才放回床上又大哭起來，檢查尿布也沒濕。蔡小姐從生產前好幾天就開始感到陣痛、已經好幾天沒睡好，昨天生產又一夜未眠，真的感覺好累、好無助，又擔心吵到隔壁床。他問護理師說：「我很想給我的孩子吃母乳，但我真的好累、**能不能先把孩子推回嬰兒室**，讓我睡一覺，**這樣真的會影響寶寶後續吃母奶嗎?**」、「看寶寶一直哭很心疼，能不能給小孩吃一下**安撫奶嘴，真的吃了奶嘴就會影響吸母奶嗎?**」請你協助以實證手法回答這些日常職執業相關問題。

問題釐清

蔡小姐

- 暫停母嬰同室是否會影響母乳哺餵？
- 使用安撫奶嘴是否會影響小孩吸吮母乳？

先生

- 魚湯及豬腳燉花生是否可增加奶水分泌？
- 使用舒乳棒或請舒乳師幫忙按摩、通奶是否可降低乳腺炎發生率？
- 服用卵磷脂(Lecithin)是否可降低乳腺炎發生率？

背景資訊

- 簡介

母乳哺餵(Breastfeeding)被公認為嬰兒餵養的規範性和首選方法，建議前六個月純母乳哺餵，並至少持續一年。而研究顯示**在第一個24小時母嬰之間的皮膚與皮膚接觸**可增加在1-4個月內母乳哺餵持續時間。國民健康署根據世界衛生組織(WHO)及聯合國兒童基金會(UNICEF)的母乳哺育策略，認為**「親子同室」與「母嬰及早肌膚接觸」是母乳哺餵關鍵**，自民國90年開始推動母嬰親善醫療院所認證制度。

- 好處
  - 嬰兒：減少急性中耳炎，胃腸道感染、遺傳過敏性皮膚炎和哮喘風險
  - 產婦：降低慢性疾病和癌症的風險

- 常見問題
  - **奶水量不足**
  - **乳腺炎**、乳頭受傷疼痛或乳房腫脹、膿腫、感染
  - **母乳餵養困難**

資料來源

UpToDate　DynaMed Powered by EBSCOhost　衛生福利部國民健康署 Health Promotion Administration, Ministry of Health and Welfare

背景資訊

- 母乳餵養困難常見原因
  - ➢出生24小時內使用奶嘴（P <0.001）
  - ➢未母嬰同室（P <0.0001）
  - ➢24小時內哺乳頻率小於8次（P <0.0001）
  - ➢初次接觸出生後嬰兒大於2小時以上之後（P <0.0001）

資料來源 DynaMed Powered by EBSCOhost

背景資料

DynaMed Powered by EBSCOhost

在第一個24小時母嬰之間的皮膚與皮膚接觸可增加母乳哺餵持續性，母乳餵養困難為影響哺乳持續性重要因素

UpToDate

母乳哺餵公認為嬰兒餵養的規範性和首選方法，奶水量不足及乳腺炎時常影響母乳哺餵

衛生福利部國民健康署
Health Promotion Administration, Ministry of Health and Welfare

「親子同室」與「母嬰及早肌膚接觸」是母乳哺餵關鍵

臨床問題

	PICO-1(中/英文)	PICO-2(中/英文)
P	新生兒/Newborn、Infant	產後婦女/Postpartum woman
I	使用安撫奶嘴/Pacifier	乳房按摩/Breast massage
C	不使用安撫奶嘴	無按摩
O	降低母乳哺餵持續性/Breastfeeding duration	乳腺炎發生率/Mastitis

這是一個●治療/預防型 ○診斷型 ○預後型 ○傷害型 問題

最適合回答的文章類型：系統性文獻回顧

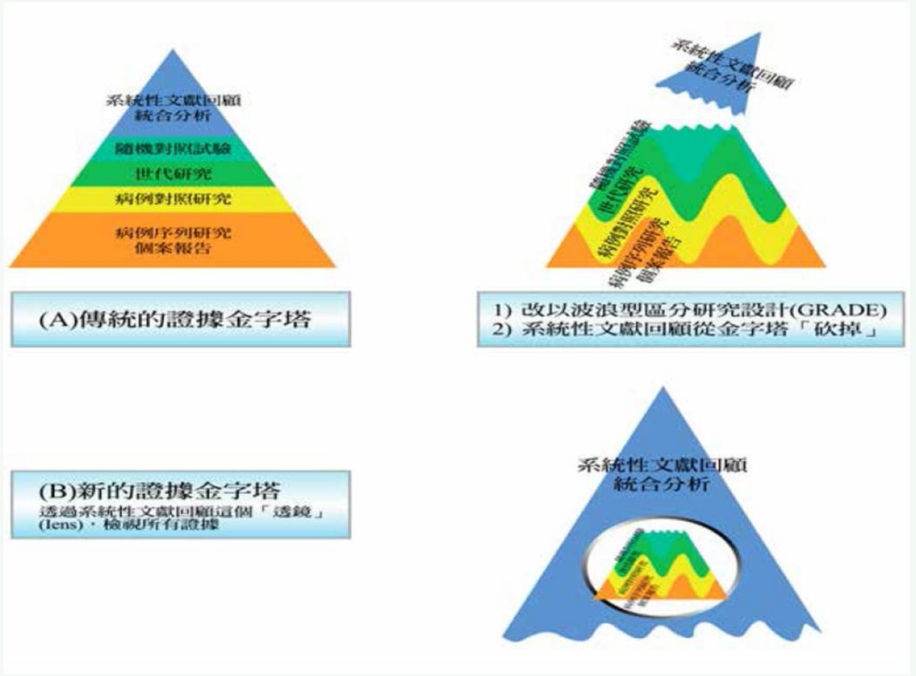
關鍵字

我們選擇第1個PICO，使用的關鍵字是：

	關鍵字(Keywords)	同義字(Synonyms)	MeSH terms
P	Infant	Newborn	“Infant, Newborn"[Mesh]
I	Pacifier	-	"Pacifiers"[Mesh]
C	-	-	-
O	Breastfeeding Duration	-	Duration

透過系統性文獻回顧「透鏡」針對證據**等級評定**及應用

新的證據金字塔強調兩個概念：(1)將證據金字塔不同研究設計的線條改為波浪形，證據等級不全然以研究設計作為判斷標準，以反映出使用GRADE評分方法之升級及降級概念；及(2)將系統性文獻回顧從證據金字塔的最頂端「砍掉」，當我們想要回答一個臨床問題時，都需先進行系統性文獻回顧，透過系統性文獻回顧這個「透鏡」(lens)，再針對證據體進行證據等級的評定及後續的臨床應用(Murad et al., 2015)。



圖一 新的證據金字塔(Murad et al., 2015)

(本圖取得原作者Hassan Murad教授授權刊登，原圖刊載於http://www.isehc.net/wp-content/uploads/2011/12/October-2015.pdf)

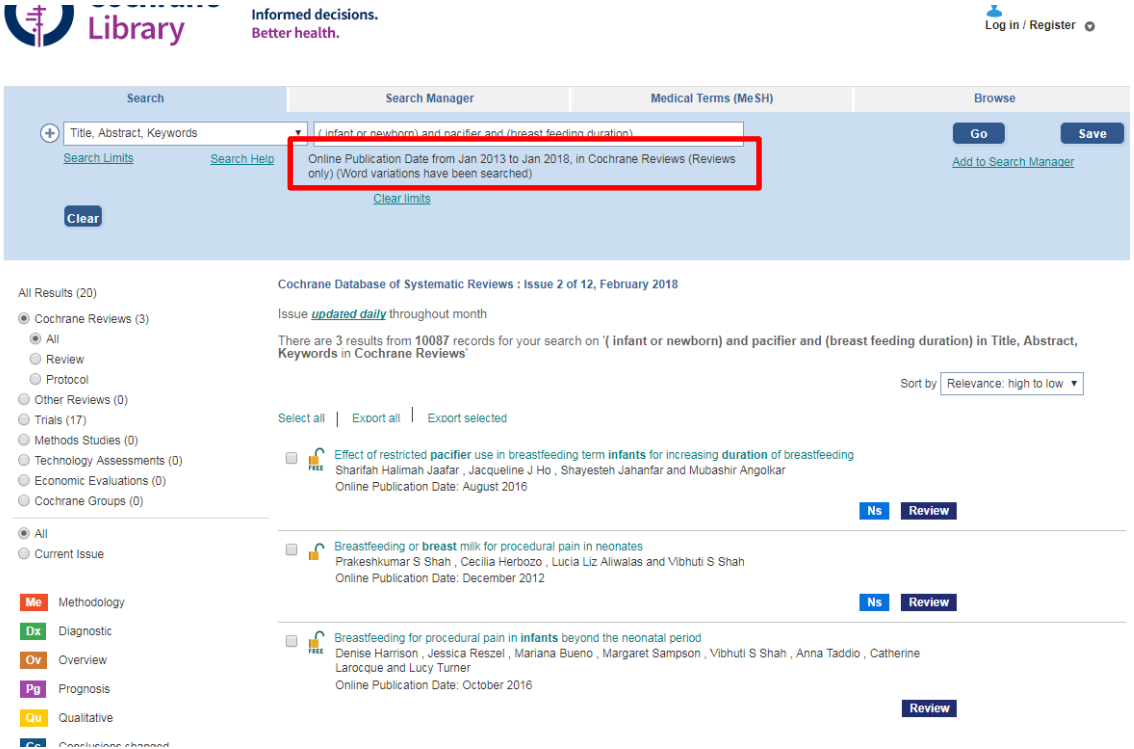
Secondary database: Cochrane

Keyword

breast feeding、pacifiers、duration使用**P、I、O之MeSH terms進行搜尋**

搜尋技巧

1. **使用Cocharane Library search Manager 搜尋加入布林邏輯 AND 作搜尋連結**
2. **Search limit: Trail、年份2013-2018、review**



Primary database: PubMed

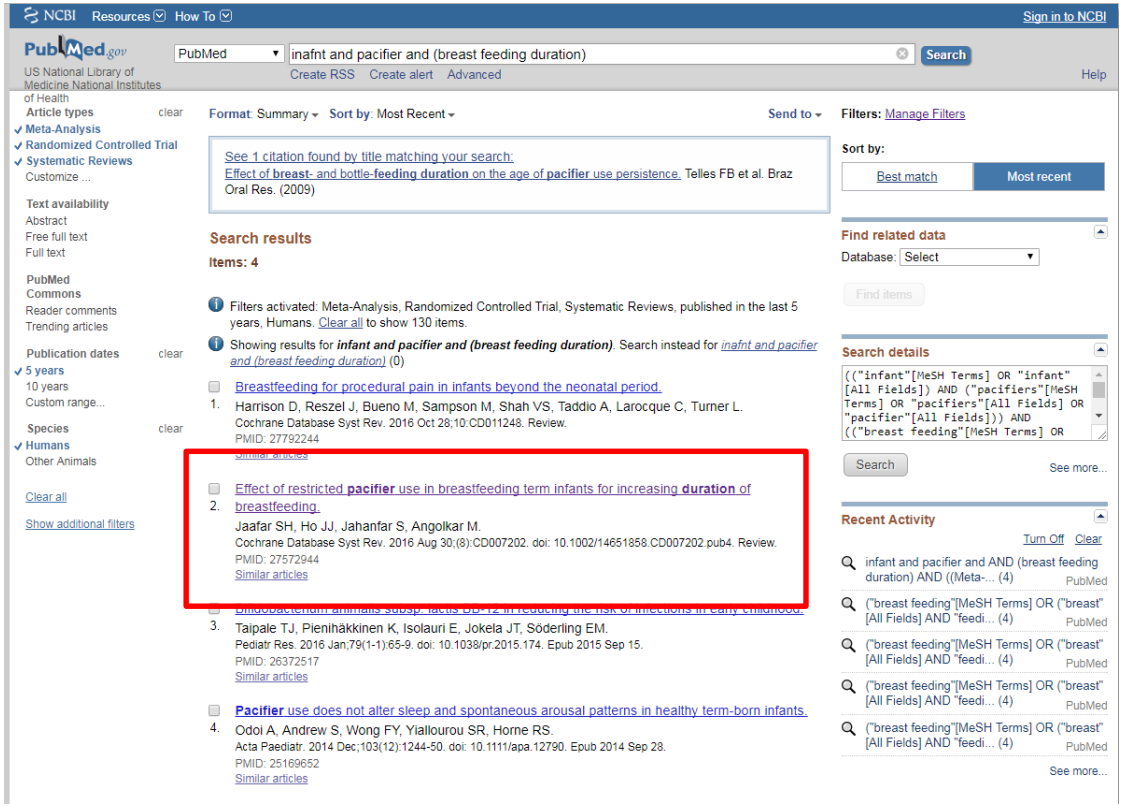
Keyword

breast feeding and pacifier and duration

使用P、I、O之MeSH terms進行搜尋

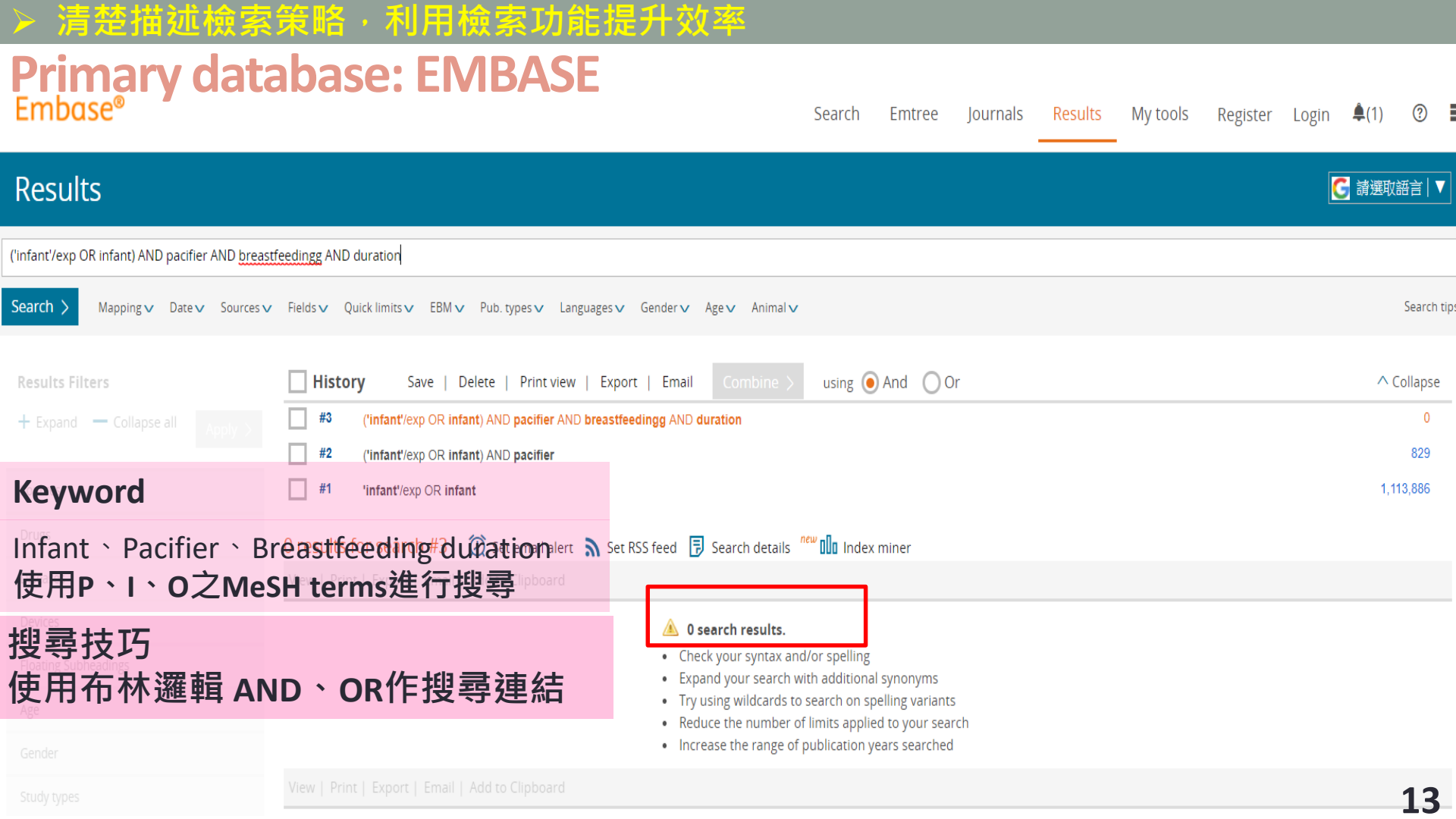
搜尋技巧

1. My NCBI
2. 使用Advanced research搜尋
3. 布林邏輯 AND 作搜尋連結
4. Search limit: RCT、SR、META、5年內、全文



➢ 清楚描述檢索策略，利用檢索功能提升效率

Primary database: EMBASE



Keyword

Infant、Pacifier、Breastfeeding duration

使用P、I、O之MeSH terms進行搜尋

搜尋技巧

使用布林邏輯 AND、OR作搜尋連結

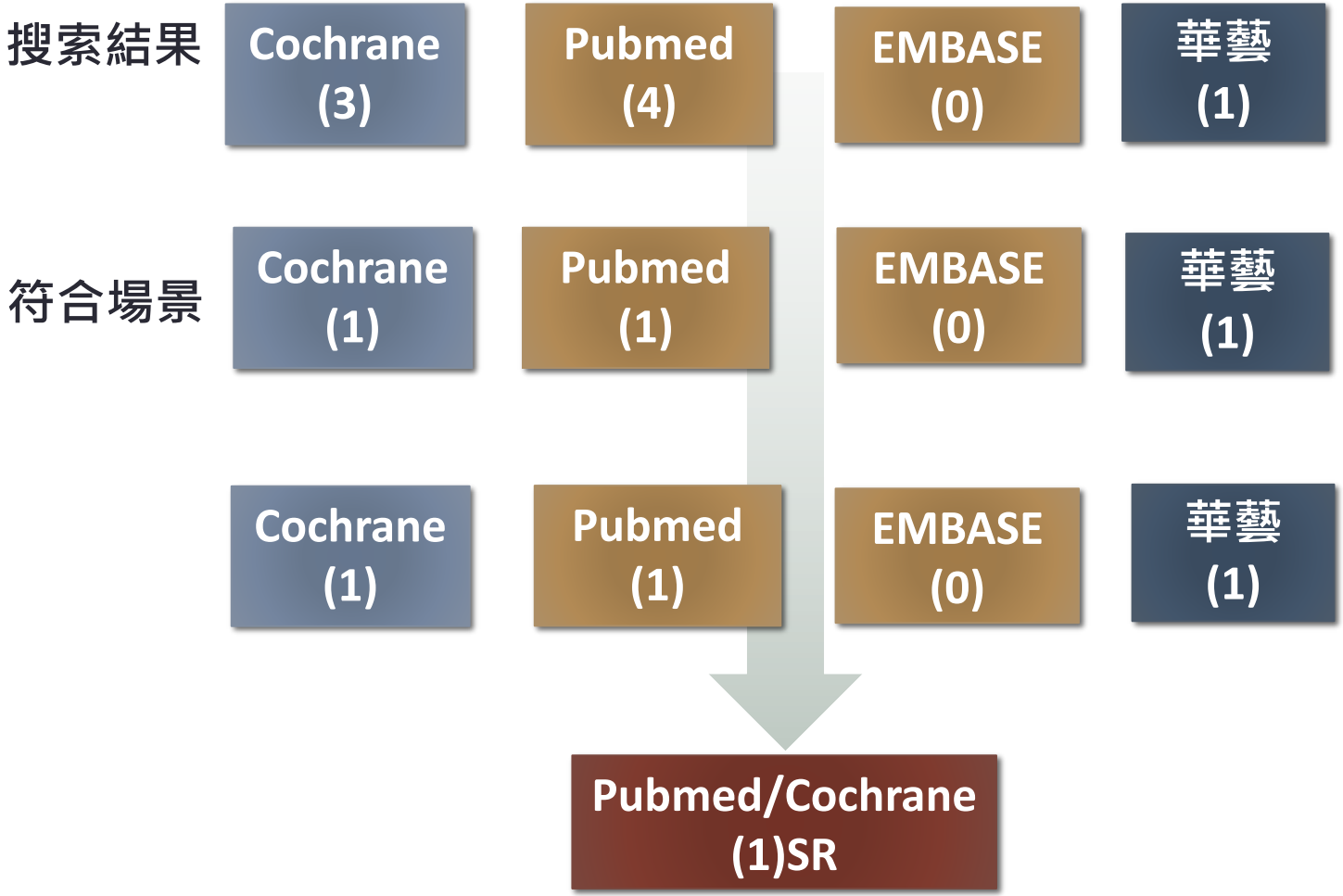
Primary database: 華藝線上圖書館

Keyword

輪狀病毒疫苗
使用I進行搜尋

搜尋技巧
Search limit:
1. 中文電子期刊
2. 醫藥衛生學科
3. 2013年以後

➢ 清楚地描述挑選文獻的理由



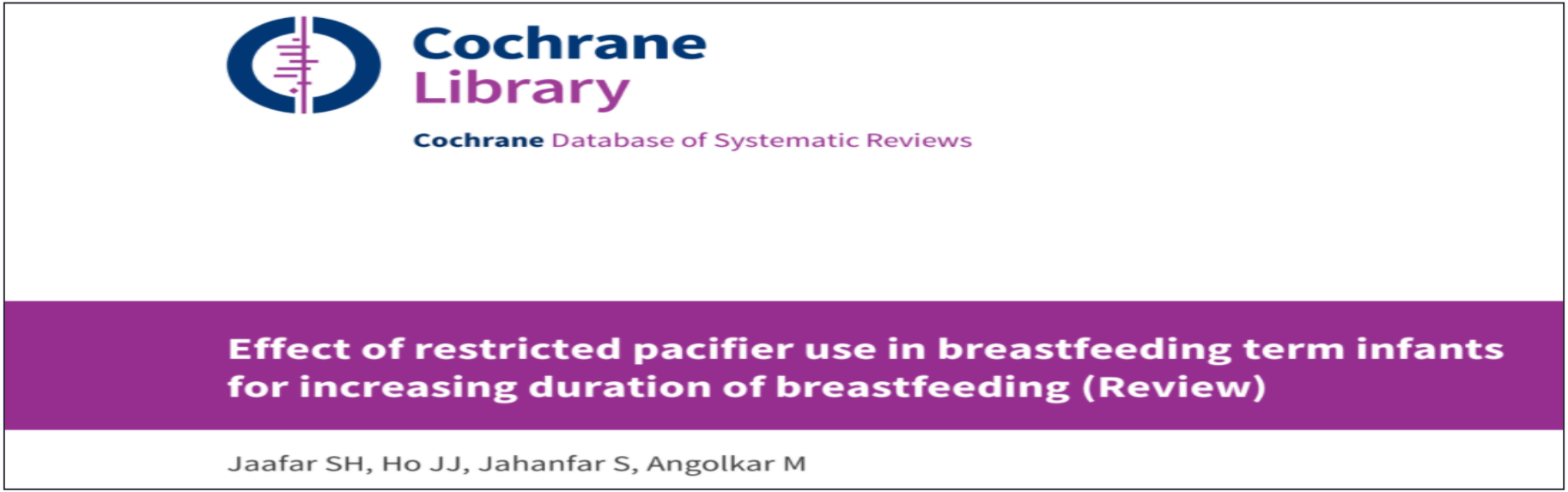
Exclusion criteria-1

- 有全文可供閱讀
- 與題目PICO不相符

Exclusion criteria-2

- 最佳證據等級
- 最佳研究設計
- 與PICO最相符
- 年份較新
- 與個案族群、年齡最為接近

嚴格評讀



這篇文獻「納入的理由」

- 最符合臨床問題
- 發表年份較新
- 樣本數大
- 最佳的研究設計
- 全文可供評讀

正確使用文獻評讀指南工具

	優點	缺點
Oxford CEBM	簡單扼要 國際廣泛運用 翻譯多國語言包含中文	
CASP	最常用 國際廣泛運用	缺乏中文
COCHRANE ROB	評讀題目少	操作不易

研究結果是否有效？（內部效度）

研究問題為何？

Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding(新生兒使用奶嘴是否會降低哺餵母乳持續性)

患者 (P) – 新生兒
處置 (I) – 使用奶嘴
對照 (C) – 無使用奶嘴
結果 (O) – 降低哺餵持續性

OBJECTIVES

To assess the effect of restricted pacifier use versus unrestricted pacifier use in healthy full-term newborns whose mothers have initiated breastfeeding and intend to exclusively breastfeed, on the duration of breastfeeding, other breastfeeding outcomes and infant health.

Yes ◌ No ◌ unclear

R- 1a. 患者是否採隨機分派進入治療組?

Criteria for considering studies for this review

Types of studies

All randomised controlled trials including quasi-randomised trials and cluster-randomised trials. Cross-over trials were not eligible for inclusion.

所有的隨機對照試驗，包括準隨機試驗和集群隨機試驗。交叉試驗不符合納入條件。

Yes No unclear

R- 1b. 各組在試驗開始時是否相似？

Results of the search

For the previous version of this review (Jaafar 2012), we identified nine reports of five randomised controlled trials (RCTs). We included three studies and excluded two. For this update we identified one new trial report, which we excluded (Feldens 2013).

Included studies

See Characteristics of included studies. We included three studies involving 1915 babies (Jenik 2009; Kramer 2001; Schubiger 1997). However, only two of these studies (involving 1302 babies: Jenik 2009; Kramer 2001) contribute data to the analyses.

搜尋5篇未有基本資料表，納入及排除條件清楚

◌ Yes ◌ No ◉ unclear

A－2a. 除了被分派的治療外，各組是否接受相同的處置？

Types of participants

Healthy full-term newborns whose mothers have initiated breastfeeding and intend to exclusively breastfeed regardless of whether they were born at home or in hospital. We planned to exclude studies including newborns exposed to bottle feeding prior to enrolment.

Types of interventions

Advice against pacifier use (restricted) compared with unrestricted or actively encouraged use of a pacifier in breastfeeding infants from postpartum period till six months of age.

Types of outcome measures

Definition of breastfeeding and partial breastfeeding

Full or exclusive breastfeeding is defined as no food (solid or liquid including water) other than breast milk. Almost exclusive breastfeeding allows infrequent supplemental liquids, other than milk formula, and in partial breastfeeding other milk supplements are regularly given along with breastfeeding (Labbok 1990).

1. 明確的母乳哺餵定義
2. 各次群組哺餵之分析時間一致

● Yes ○ No ○ unclear

A－2b. 是否所有參加試驗的患者都列入計算？且依原隨機分派的組別分析？

Incomplete outcome data

Overall, the dropout rate was less than 10% from both arms, i.e. 4.9% versus 4.5% in Jenik 2009, 9.3% versus 7.1% in Kramer 2001, respectively. However, in Schubiger 1997, the total dropout rate (lost to follow-up and protocol violations) was 22% versus 9.7%, respectively. We judged this imbalance to be high risk of bias.

Selective reporting

We detected no selective reporting and all expected outcomes were reported.

Other potential sources of bias

There were no other potential sources of bias identified for two studies (Jenik 2009; Kramer 2001). We judged Schubiger 1997 to be at high risk of bias in this domain because we had to impute the figures for the primary outcomes from percentages and others from a graph. In addition, the exact denominators for the primary outcomes are unclear.

除排除之研究樣本外，所有納入之樣本皆有納入分析

Yes No unclear

M-3. 測量是否客觀？或病患和醫師不知道接受的治療為何？

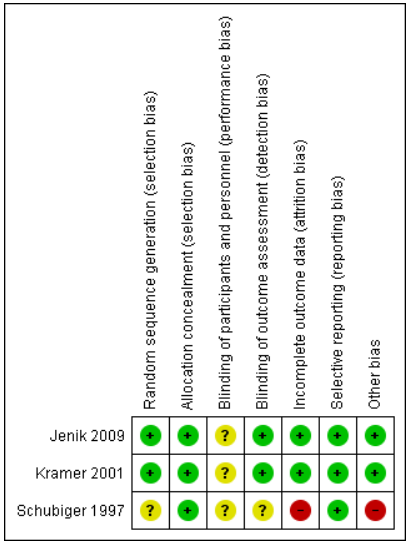
Selection of studies

Two review authors independently assessed for inclusion the potential study identified as a result of the search strategy. We resolved any disagreement through discussion or, if required, we consulted the third review author.

Data extraction and management

We designed a form to extract data. In the previous version of this review (Jaafar 2012), for eligible studies, two review authors extracted the data using the agreed form. We resolved discrepancies through discussion or, if required, we consulted the third review author. Data were entered into Review Manager software (RevMan 2014) and checked for accuracy.

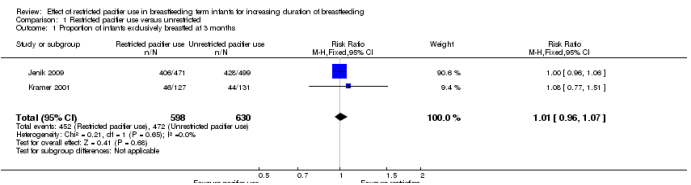
When information regarding any of the above was unclear, we planned to contact authors of the original reports to provide further details.

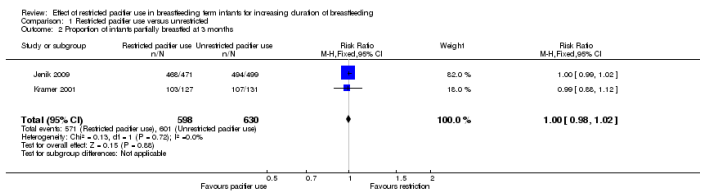


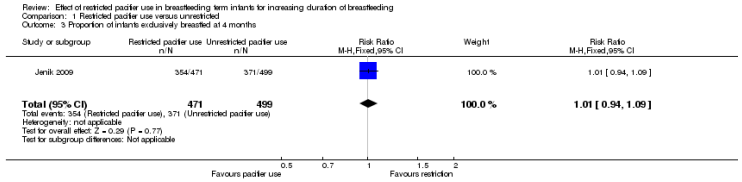
1. 兩位作者共同討論研究結果，若無共識則有第三作者
2. 有考量到樣本中的盲性

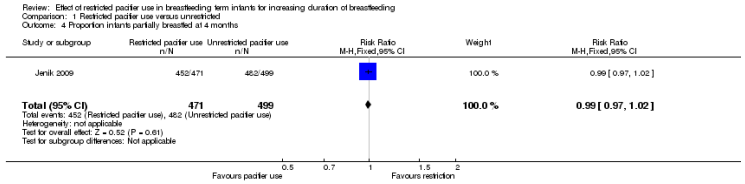
Yes No unclear

研究結果為何？









沒有直接證據顯示使用安撫奶嘴會導致母乳哺餵持續性降低

Comparison: Restricted or no pacifier use versus unrestricted pacifier use

We included two out of three RCTs enrolling 1302 healthy full-term breastfeeding infants for meta-analysis (Jenik 2009; Kramer 2001). Both of the trials contributed to at least one of the primary outcomes, i.e. proportion of infants partially or exclusively breastfed at three and four months of age. Comparison between restricted pacifier use (intervention) and unrestricted pacifier use (control) revealed that there was no difference in the proportion of infants exclusively breastfed at three months (risk ratio (RR) 1.01; 95% confidence interval (CI) 0.96 to 1.07, two studies, 1228 babies, $I^2 = 0\%$, (Analysis 1.1)) and at four months of age (RR 1.01; 95% CI 0.94 to 1.09, one study, 970 babies, *moderate-quality evidence* (Analysis 1.3)). There was also no difference in the proportion of infants partially breastfed at three months (RR 1.00; 95%; CI 0.98 to 1.02, two studies, 1228 babies, $I^2 = 0\%$, (Analysis 1.2)), or at four months (RR 0.99; 95% CI 0.97 to 1.02, one study, 970 babies (Analysis 1.4)). Thus, restricted or no pacifier use in full-term breastfeeding infants after birth or after the establishment of lactation did not significantly affect the prevalence or duration of exclusive or partial breastfeeding up to the age of four months. None of the included studies reported data on the other primary outcomes, i.e. duration of partial or exclusive breastfeeding.

Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
How common is the problem?	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
Is this diagnostic or monitoring test accurate? (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	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
What will happen if we do not add a therapy? (Prognosis)	Systematic review of inception cohort studies	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
Does this intervention help? (Treatment Benefits)	Systematic review of randomized trials or *n*-of-1 trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
What are the COMMON harms? (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, *n*-of-1 trial with the patient you are raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up 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.)**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
What are the RARE harms? (Treatment Harms)	Systematic review of randomized trials or *n*-of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect			
Is this (early detection) test worthwhile? (Screening)	Systematic review of randomized trials	Randomized trial	Non -randomized controlled cohort/follow-up study**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning

GRADE

		Quality
Riskof bias(偏誤風險)	No	⊕ 低度建議
Inconsistence(不一致性)	No	
Indirectness(間接性)	No	
Imprecision(不精確性)	No	
Publication bias(發表偏誤)	No	
Large effect size(結果顯著)	No	
Plausible confounding(干擾因素)	No	
Dose-response gradient (劑量效應關係)	No	

臨床應用

這篇 Level 1 證據
可應用於我們的個案嗎？

• 我們的病患與研究是否相仿？ ●性別 ●相同疾病 ●年齡 ●疾病特徵（症狀/共病症）	●Yes ○No ○Unclear
• 這項治療方式在本地可行嗎？ ●醫療政策 ● 技術性 ●風土民情	●Yes ○No ○Unclear
• 是否符合病患主要訴求？ ●病患考量點	●Yes ○No ○Unclear
• 此項治療好處是否多於壞處？ ●治療效果 ●費用可接受 ● 便利性	○Yes ○No ●Unclear

臨床應用

這篇 Level 1 證據
可應用於我們的個案嗎？

選擇	正面考量	反面考量	證據等級
純母乳哺餵	節省花費 提升嬰兒及母體健康	母親無法適當休息	Level 2
使用奶嘴	安撫嬰兒哭鬧情形 母親獲得休息	降低母乳哺餵持續性 嬰兒產生乳頭混淆	

成本效益

- 長期哺餵母乳降低罹患**乳腺癌、卵巢癌和子宮內膜癌、骨質疏鬆症、心血管疾病、糖尿病**風險
- 哺餵母乳每年節省家庭醫療支出約**1000美元**，全國成本節約約**130億美元**，並可**避免911人死亡**
- 市售奶粉價錢550-959元不等，安撫奶嘴62-83元不等，純母乳哺餵約可節省**(550+62)=612至(959+83)=1042元**

參考資料：
Schanler, R. J. (2016). Maternal and economic benefits of breastfeeding. *Up to date, 5022*(23), 1-9.

臨床應用

這篇 Level 1 證據
可應用於我們的個案嗎？

好處	• 降低嬰兒哭鬧情形 • 降低哺餵母乳頻率母親可獲得充足休息
壞處	• 降低母乳哺餵持續性 • 造成嬰兒乳頭混淆情形
病人價值觀與期望值	• 產前及產後都無法充分休息，希望獲得充足睡眠

臨床回覆

- 媽媽你好，您真的辛苦了。針對您剛剛的問題，我們目前臨床研究的結果沒有直接證據顯示使用奶嘴安撫小孩會影響到之後的母乳哺餵持續時間或效果，所以是否要使用奶嘴，是依您的狀況來決定，我們也會提供相關的優、缺點來幫助你做出這樣困難的決定。
- 其實，還有另外一個措施建議您，文獻中也指出，有效的母乳哺餵可有效的降低小孩哭鬧及增進媽媽哺乳效果及信心，若您不介意，我是否能在使用奶嘴前，先進一步了解您實際哺乳過程遇到的狀況，看是否能夠解決，最後一步再決定是否使用奶嘴呢？

懇請各位老師指導