

A woman with brown hair, wearing a white lab coat, is looking down at a baby in a stroller. The baby is wearing a blue patterned outfit. The background is blurred, suggesting an indoor setting like a hospital or clinic. A semi-transparent yellow banner is overlaid on the image, containing the text.

Evidence-Based Medicine

實證醫學競賽

內科部

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臨床場景 Clinical Scenario

蔡小姐近日產下一子，在稍作休息恢復後，護理師將寶寶推到蔡小姐床邊進行母嬰同室，並學習如何照顧新生兒及哺餵。作為新手媽媽，她想了解是否有特殊的飲食配方可以增加奶水量，又如果在寶寶哭鬧時使用奶嘴安撫是否會影響後續吃母乳的意願？



背景知識

奶嘴

優點

1. 吸奶嘴也有很好安撫作用
2. 可減少吸手指的機會
3. 入睡的時候吸著奶嘴可以減少「嬰兒猝死症」的風險

缺點

1. 頻繁而且長時間吸奶嘴是會影響乳牙咬合
2. 稍微增加中耳炎、口腔念珠菌感染和蛀牙發生的機率

使用時機

建議親餵母乳之女性應待熟悉哺乳並且乳量穩定時再讓嬰兒使用奶嘴



以PICO建構第一個臨床問題

	PICO/關鍵字	MeSH同義字	中文關鍵字
P Patient/Problem	Healthy term infants Asian	Healthy neonates Full term newborn	健康新生兒
I Intervention	Pacifier use	Infant equipment Pacifier use	使用奶嘴
C Comparison	No pacifier use	No infant equipment No pacifier use	未使用奶嘴
O Outcome	Child health Breastfeeding	Child growth Lactation	嬰兒發展 母乳哺育

治療/預防型問題
 診斷型問題
 預後型問題
 傷害/病因型問題

以PICO建構第二個臨床問題

	PICO/關鍵字	MeSH同義字	中文關鍵字
P Patient/Problem	Postpartum women	Postpartum period	產後婦女
I Intervention	Dietary therapy Dietary interventions	Dietary pattern	食療 飲食型態
C Comparison	Placebo	-	安慰劑
O Outcome	Increase lactation	Increase breast milk	泌乳增加

治療/預防型問題 診斷型問題 預後型問題 傷害/病因型問題

檢索策略 - 提升檢索效率

首先以 P、I 做搜尋，再依據結果適當加入關鍵字及同義詞。

P	Healthy term infants OR Full term newborn OR Healthy neonates
+	
I	Pacifier use OR Infant equipment
+	
C	No pacifier use OR No infant equipment
+	
O	Lactation OR Child health OR Breastfeeding

檢索策略 - 提升檢索效率

首先以 P、I 做搜尋，再依據結果適當加入關鍵字及同義詞。

P	Healthy term infants OR Full term newborn OR Healthy neonates
+	
搜索範圍	Free full text、Within 5 years、Human species
研究類型	Systematic review、Meta-analysis、Randomized controlled trial, cohort study
語言地區	English、中文[台灣本土文獻]
+	
O	Lactation OR Child health OR Breastfeeding



搜索策略

Clinical Queries

Systemic Review
RCT
Cohort study

Within 5 years

Meet our PICO



資料庫搜尋



Systems

Summaries

Synopses of Syntheses

Syntheses

Synopses of Single Studies

Single Studies



搜尋 Cochrane Library

Search Search Manager Medical Terms (MeSH) Browse

Title, Abstract, Keywords
AND Search All Text
[Search Limits](#) [Search Help](#) (Word variations have been searched)

[Add to Search Manager](#)

Database

- Cochrane Reviews
 - All
 - Review
 - Protocol
- Other Reviews
 - Trials
 - Methods Studies
 - Technology Assessments
 - Economic Evaluations
 - Cochrane Groups

Dates

Publication Year (available for all databases)

Year (YYYY) the article was originally published
**For Cochrane Reviews, this is the year of the last

- All Years
- Between and

輸入關鍵字、適當使用Truncation
『 Healthy term infants * Pacifier use* 』

使用Limit功能
限定文章類型
限定『 2014-2018 』文章



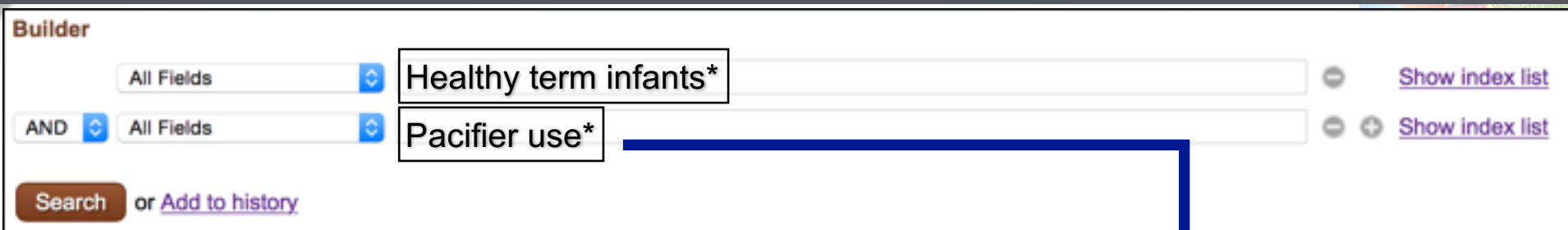
搜尋 PubMed

Builder

All Fields [Show index list](#)

AND [Show index list](#)

or [Add to history](#)







輸入關鍵字、適當使用Truncation
『 **Healthy term infants * Pacifier use*** 』
適當使用布林運算
『 **AND** 』、『 **OR** 』

限定適當文章類型
限定適當搜尋範圍



搜尋結果

Secondary Data Base	搜尋篇數	符合PICO
 Cochrane	9	1
Primary Data Base	搜尋篇數	符合PICO
 PubMed	4	0
 Embase[®]	6	3
 airiti Library 華藝線上圖書館	1	0




資料庫搜尋結果

全三總

全人照護

Wholehearted

來源	主題	年份
 Cochrane Library	Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding.	2016
Embase®	Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding.	2016
Embase®	Pacifier versus no pacifier in healthy term infants for increasing duration of breastfeeding: A cochrane review	2012



Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding.

Methods	Systemic Review	✓ ? ✗
P	Healthy full-term newborns whose mothers have initiated breastfeeding and intend to exclusively breastfeed	✓
I	Restricted pacifier use	✓
C	No restriction of pacifier use	✓
O	Lactation prevalence, duration of breastfeeding	✓
Time	-	?

Pacifier versus no pacifier in healthy term infants for increasing duration of breastfeeding: A cochrane review

Methods	Systemic Review	✓ ? ✗
P	Healthy full- term newborns whose mothers have initiated breastfeeding and intend to exclusively breastfeed	✓
I	Pacifier use	✓
C	No pacifier use	✓
O	The duration of breastfeeding, other breastfeeding outcomes and infant health	✓
Time	-	?

文章	M	P	I	C	O	T
Effect of restricted pacifier use in 年份較新 breastfeeding term infants for increasing duration of breastfeeding.	✓	✓	✓	✓	✓	?
Pacifier versus no pacifier in healthy term infants for increasing duration of breastfeeding: A cochrane review	✓	✓	✓	✓	✓	?





評讀工具 Critical Appraisal tools

CEBM



Critical appraisal is the systematic evaluation of clinical research papers in order to establish:

1. Does this study address a [clearly focused question](#)?
2. Did the study use valid methods to address this question?
3. Are the valid results of this study important?
4. Are these valid, important results applicable to my patient or population?

If the answer to any of these questions is “no”, you can save yourself the trouble of reading the rest of it.

This section contains useful tools and downloads for the critical appraisal of different types of medical evidence. Example appraisal sheets are provided together with several helpful examples.



Critical Appraisal Worksheets

English

- [Systematic Reviews](#) Critical Appraisal Sheet
- [Diagnostics](#) Critical Appraisal Sheet
- [Prognosis](#) Critical Appraisal Sheet
- [Randomised Controlled Trials](#) Critical Appraisal Sheet





(A) ARE THE RESULTS OF THE REVIEW VALID?

此系統回顧的結果效度夠嗎?

1. What question (PICO) did the systematic review address?
-系統回顧是否問了一個清楚明確的問題？
2. Is it unlikely that important, relevant studies were missed?
-搜尋方法及搜尋結果評估
3. Were the criteria used to select articles for inclusion appropriate?
-納入及排除條件評估選擇收錄研究的標準是否適切？
4. Were the included studies sufficiently valid for the type of question asked?
-文獻效度(試驗方法)評估
5. Were the results similar from study to study?
-結果評估





1. What question (PICO) did the systematic review address?
- 系統回顧是否問了一個清楚明確的問題？

This paper: Yes  No Unclear

Objectives

To assess the effect of **restricted** 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**.

ANS：是，此篇文章明確的要系統性探討足月新生兒開始哺胃母乳時奶嘴的使用與否，與餵奶的持續時間和新生兒死亡的關係

。





2. Is it unlikely that important, relevant studies were missed? -搜尋方法及搜尋結果評估

This paper: Yes No  Unclear

Electronic searches

We searched the **Cochrane Pregnancy and Childbirth Group's Trials Register** by contacting their Information Specialist (30 June 2016).

The Register is a database containing over 22,000 reports of controlled trials in the field of pregnancy and childbirth. For full search methods used to populate the Pregnancy and Childbirth Group's Trials Register including the detailed search strategies for **CENTRAL, MEDLINE, Embase and CINAHL**; the list of hand-searched journals and conference proceedings, and the list of journals reviewed via the current awareness service, please follow this link to the editorial information about the **Cochrane Pregnancy and Childbirth Group** in the Cochrane Library and select the '*Specialized Register*' section from the options on the left side of the screen.

Searching other resources

We searched the reference lists of retrieved studies.
We did not apply any language or date restrictions.

ANS : 否 ,
此篇文章所收尋範圍有 **Cochrane和 Medline** , 等其他大型的database , 但並未提及是否有找到未出版的文章或研究 , 也無明確的指出收尋策略。



3. Were the criteria used to select articles for inclusion appropriate? - 納入及排除條件評估選擇收錄研究的標準是否適切?

This paper: Yes  No Unclear

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).

Selection criteria

Randomised and quasi-randomised controlled trials comparing restricted versus unrestricted pacifier use in healthy full-term newborns who have initiated breastfeeding.



3. Were the criteria used to select articles for inclusion appropriate? - 納入及排除條件評估選擇收錄研究的標準是否適切?

This paper: Yes  No Unclear

Characteristics of excluded studies *[ordered by study ID]*

Study	Reason for exclusion
Collins 2004	This RCT aimed to determine the effect of artificial teats and cup on breastfeeding in preterm infants and not term infants, our pre-specified inclusion criteria
Feldens 2013	This was an RCT examining the effect of home visits for the purpose of giving breastfeeding advice as well as advice about pacifier use. The control group treatment was not described. The primary outcome was pacifier use
Howard 2003	This RCT evaluated the effect of bottle feeding and pacifier use versus cup feeding and delayed pacifier use in breastfeeding infants. Infants in both the intervention and the control group used pacifiers and hence there is no comparison between pacifier use and non-pacifier use in breastfeeding infants. The study is excluded because the study population do not meet our inclusion criteria, as it included women who did not intend to breastfeed. Furthermore, the results for breastfeeding duration are presented as adjusted odds ratios and the primary data are not reported. Additionally, our review did not have an outcome 'breastfeeding at 5 weeks', as this is too short a duration to be clinically meaningful

ANS : 是，此篇文章所引用及排除的標準都在Method部分都有詳細說明。



4. Were the included studies sufficiently valid for the type of question asked?

- 文獻效度(試驗方法)評估

估

This paper: Yes  No Unclear

Jenik 2009

Methods	A multicentre, non-inferiority, RCT. The randomisation was carried out centrally with consecutively numbered, sealed, opaque envelopes containing random-generated numbers constructed by an independent statistician	
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Kramer 2001 (Continued)

Random sequence generation (selection bias)	Low risk	“Randomisation within each stratum was accomplished using computer-generated random numbers in blocks of 4.” “Women were stratified by parity and if multiparous according to whether they had breastfed previously.”
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Schubiger 1997

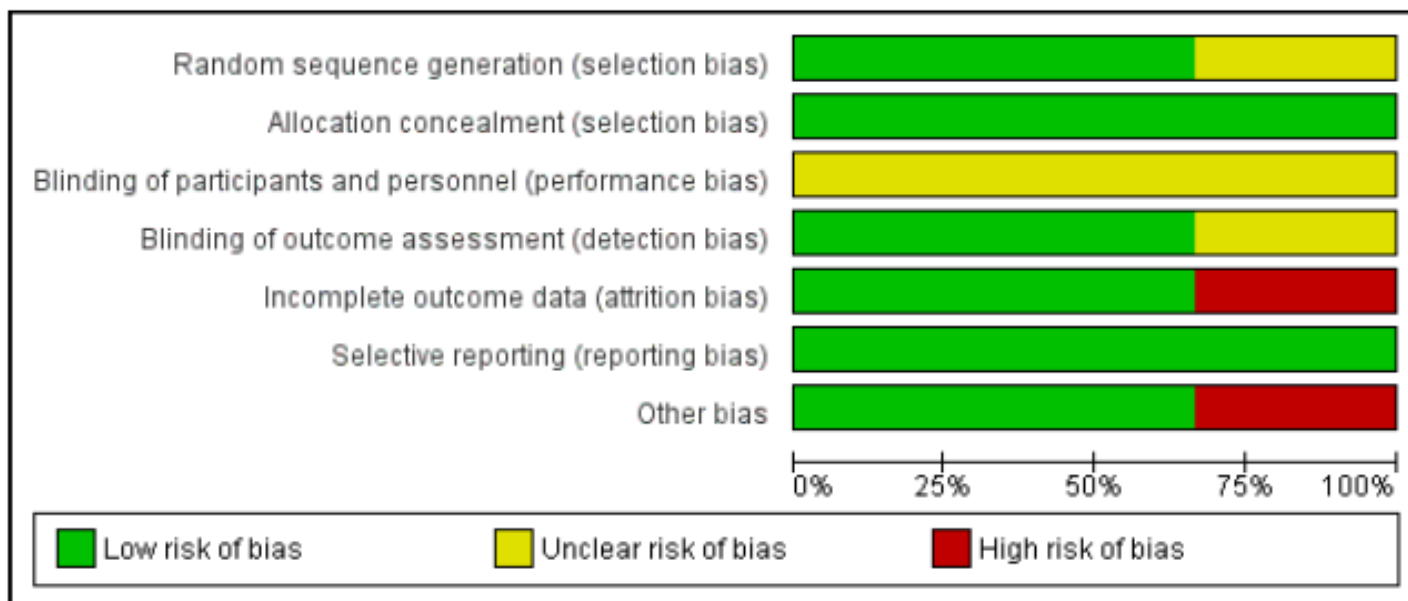
Methods	Multicentre prospective randomised trial (from 10 centres).
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4. Were the included studies sufficiently valid for the type of question asked? - 文獻效度(試驗方法)評估

This paper: Yes ✓ No Unclear

Figure 1. : 'Risk of bias' graph: review authors' judgements about each risk of bias item presented as percentages across all included studies.



4. Were the included studies sufficiently valid for the type of question asked? -文獻效度(試驗方法)評估

This paper: Yes  No Unclear

	Schubiger 1997	Kramer 2001	Jenik 2009	
	?	+	+	Random sequence generation (selection bias)
	+	+	+	Allocation concealment (selection bias)
	?	?	?	Blinding of participants and personnel (performance bias)
	?	+	+	Blinding of outcome assessment (detection bias)
	-	+	+	Incomplete outcome data (attrition bias)
	+	+	+	Selective reporting (reporting bias)
	-	+	+	Other bias

ANS : 否，此篇回顧性文章引用了三個RCT，並去分析RCT的品質，包含各種可能的誤差(bias)。

5. Were the results similar from study to study?

-結果評估

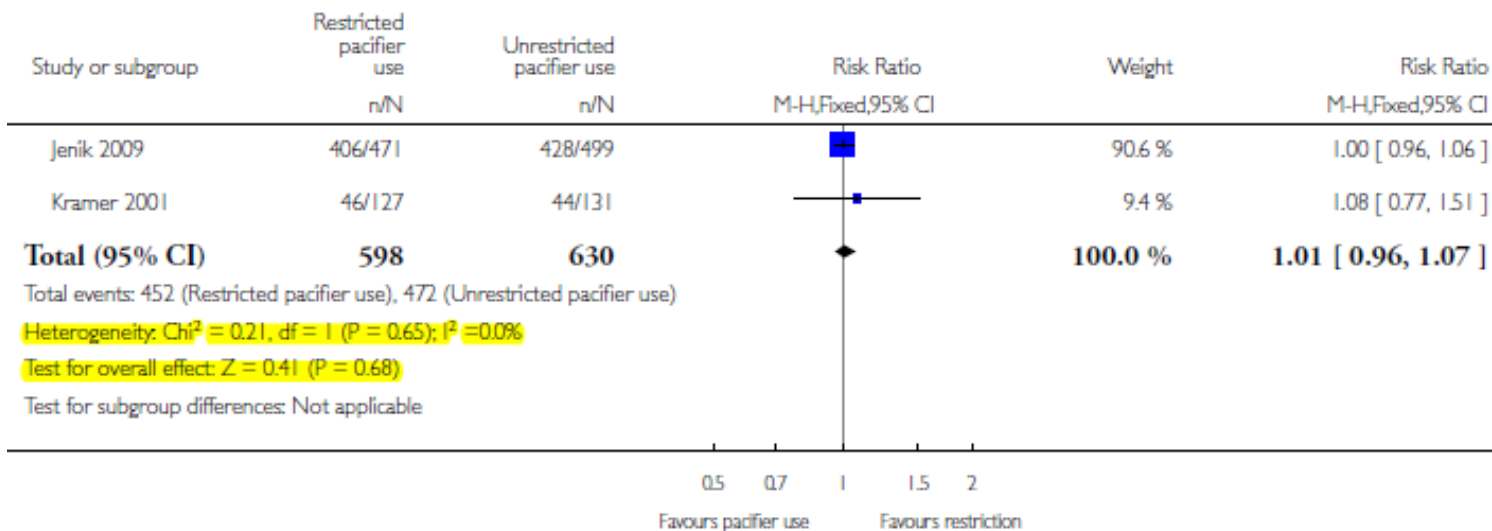
This paper: **Yes** ✓ **No** **Unclear**

Analysis 1.1. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 1 Proportion of infants exclusively breastfed at 3 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 1 Proportion of infants exclusively breastfed at 3 months





5. Were the results similar from study to study?

全三總 全人照護 Wholehearted Holistic Care

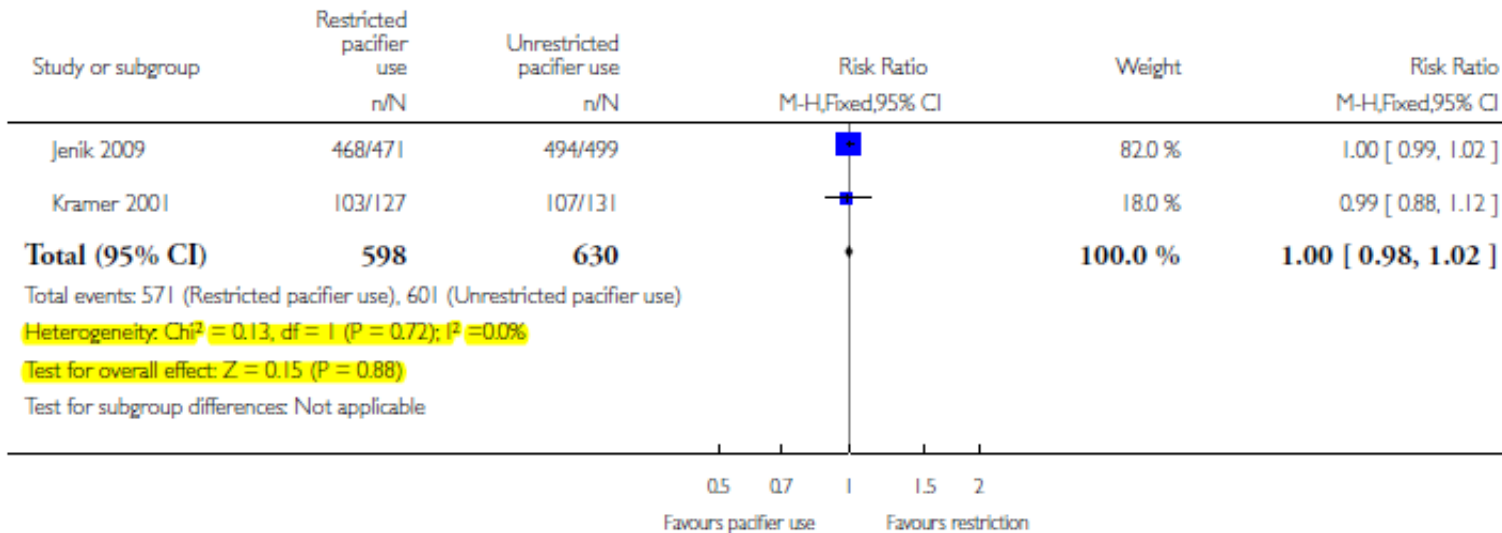
This paper: Yes  No Unclear

Analysis 1.2. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 2 Proportion of infants partially breastfed at 3 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 2 Proportion of infants partially breastfed at 3 months



5. Were the results similar from study to study?

-結果評估

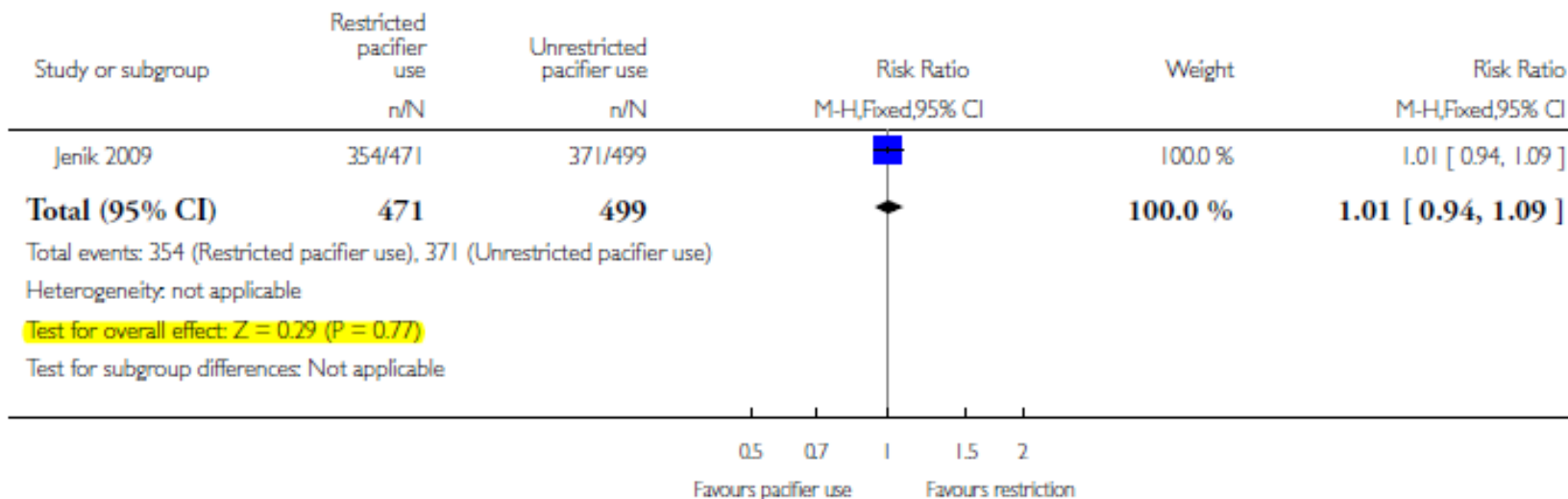
This paper: Yes  No Unclear

Analysis 1.3. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 3 Proportion of infants exclusively breastfed at 4 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 3 Proportion of infants exclusively breastfed at 4 months





5. Were the results similar from study to study?

-結果評估

This paper: Yes  No Unclear

Analysis 1.4. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 4 Proportion infants partially breastfed at 4 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

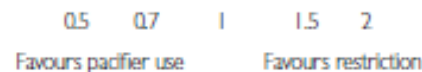
Outcome: 4 Proportion infants partially breastfed at 4 months

ANS : 是，此兩個試驗的結果根據統計分析
Chi Square (P value) 未小於0.1
I 的異質性分析均是 0 %
且Q/df結果均未大於1
=> 表示各研究結果無統計學上的異質性。

Heterogeneity: not applicable

Test for overall effect: $Z = 0.52$ ($P = 0.61$)

Test for subgroup differences: Not applicable





此系統回顧的結果效度夠嗎?

	Yes	No	Unclear
系統回顧是否問了一個清楚明確的問題	✓		
是否此篇回顧的搜尋可能遺漏合適的臨床試驗		✓	
納入及排除條件評估選擇收錄研究的標準是否適切	✓		
文獻效度(試驗方法)評估所收錄的研究 是否是有效力的研究	✓		
收錄的各個研究節果是否有一致性	✓		





(B) WHAT WERE THE RESULTS? - 結果如何？

Analysis 1.1. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 1 Proportion of infants exclusively breastfed at 3 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 1 Proportion of infants exclusively breastfed at 3 months

Study or subgroup	Restricted pacifier use	Unrestricted pacifier use	Risk Ratio M-H,Fixed,95% CI	Weight	Risk Ratio M-H,Fixed,95% CI
	n/N	n/N			
Jenik 2009	406/471	428/499		90.6 %	1.00 [0.96, 1.06]
Kramer 2001	46/127	44/131		9.4 %	1.08 [0.77, 1.51]
Total (95% CI)	598	630		100.0 %	1.01 [0.96, 1.07]

Total events: 452 (Restricted pacifier use), 472 (Unrestricted pacifier use)

Heterogeneity: $Chi^2 = 0.21$, $df = 1$ ($P = 0.65$); $I^2 = 0.0\%$

Test for overall effect: $Z = 0.41$ ($P = 0.68$)

Test for subgroup differences: Not applicable

0.5 0.7 1 1.5 2
Favours pacifier use Favours restriction





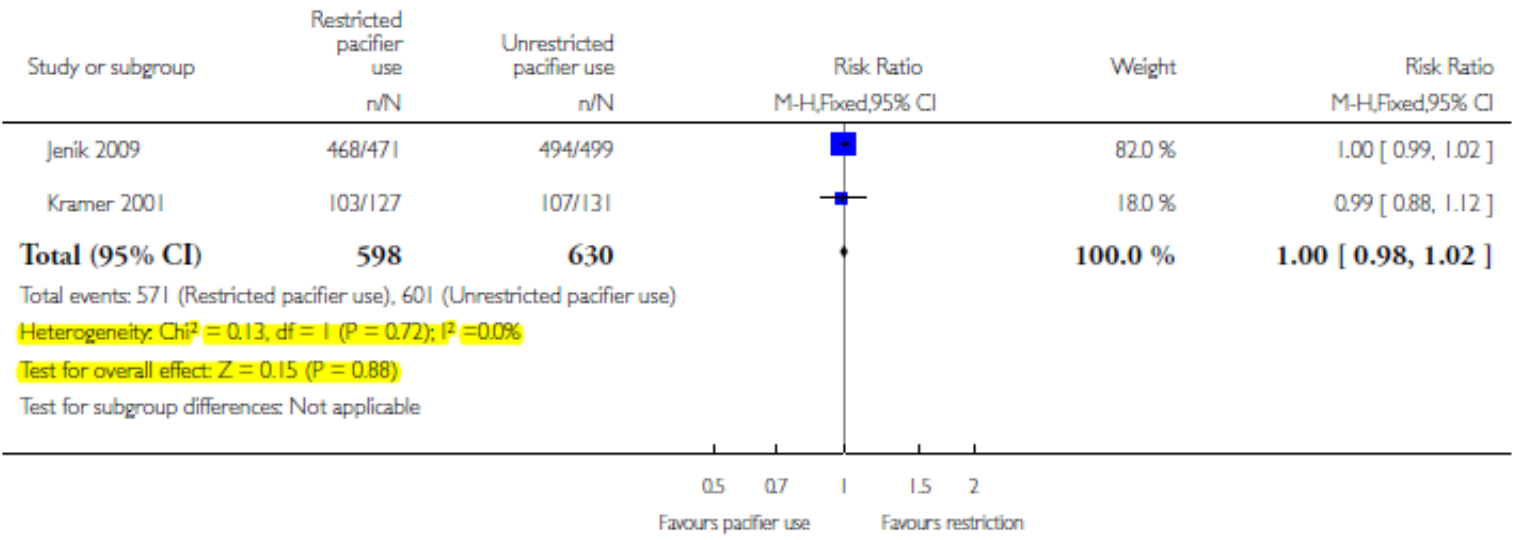
(B) WHAT WERE THE RESULTS? - 結果如何?

Analysis 1.2. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 2 Proportion of infants partially breastfed at 3 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 2 Proportion of infants partially breastfed at 3 months





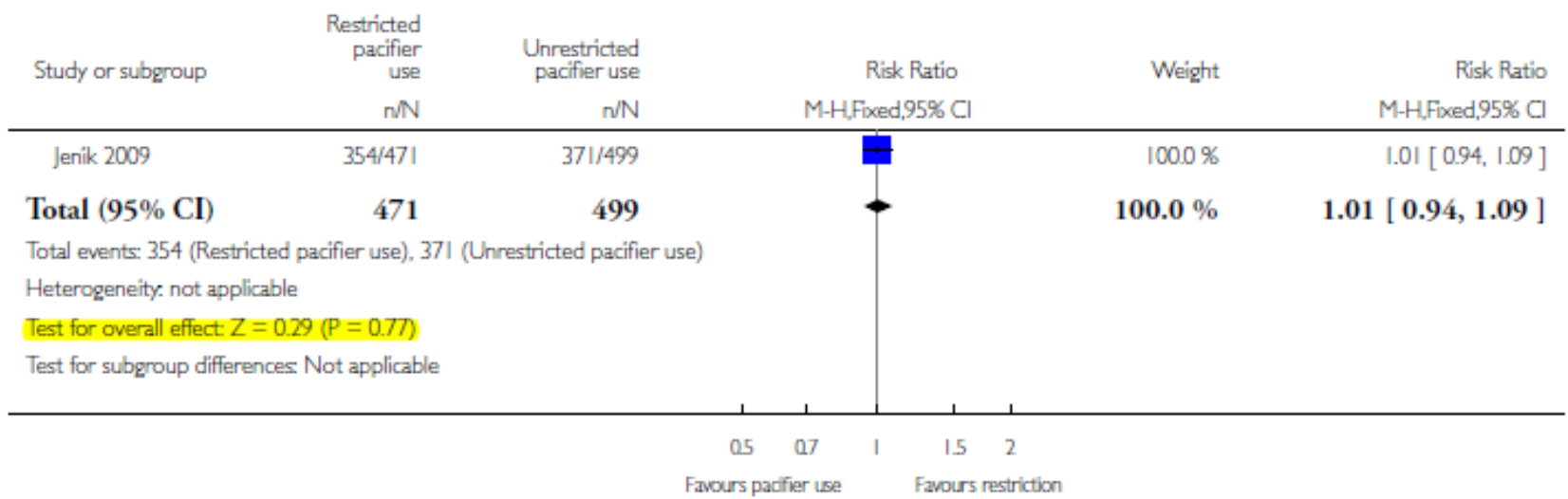
(B) WHAT WERE THE RESULTS? - 結果如何?

Analysis 1.3. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 3 Proportion of infants exclusively breastfed at 4 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 3 Proportion of infants exclusively breastfed at 4 months





(B) WHAT WERE THE RESULTS? - 結果如何？

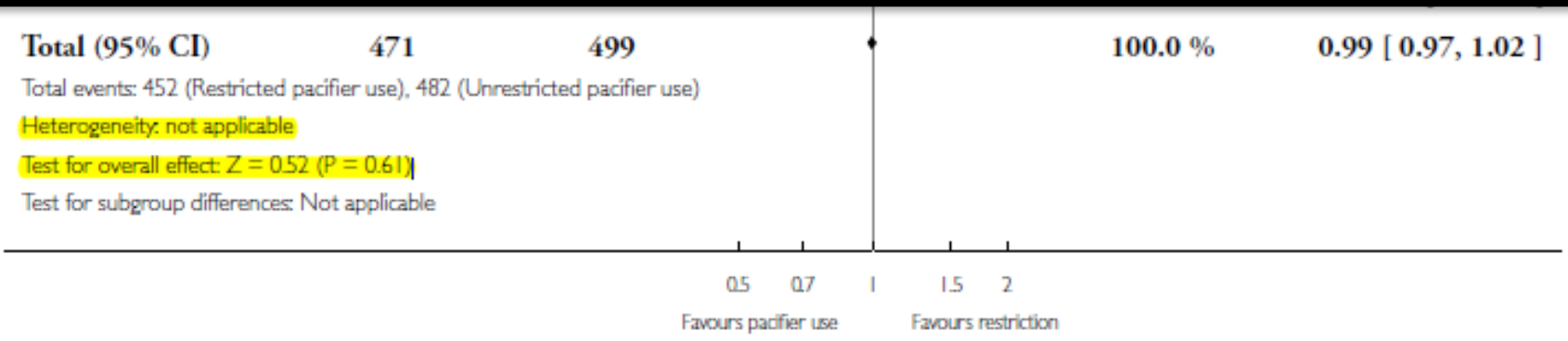
Analysis 1.4. Comparison 1 Restricted pacifier use versus unrestricted, Outcome 4 Proportion infants partially breastfed at 4 months.

Review: Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding

Comparison: 1 Restricted pacifier use versus unrestricted

Outcome: 4 Proportion infants partially breastfed at 4 months

ANS：這篇回顧性文章的統計結果告訴我們，是否嚴格控制奶嘴的使用對於新生兒在第三個月或是第四個月時是否是完全母乳，或是部份母乳使用是沒有統計學上顯著差異的。



OCEBM Level of Evidence, 2011

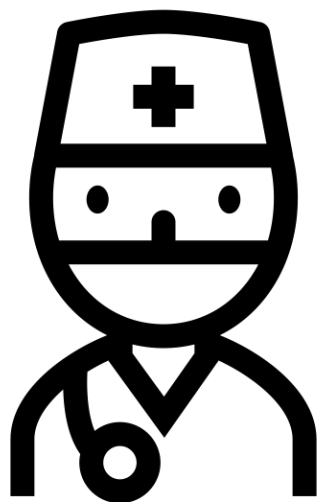
Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
How common is the problem?	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
Is this 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 <i>n</i> -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, <i>n</i> -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 <i>n</i> -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





臨床應用 - 回覆病人問題

蔡小姐您好：根據我們臨床團隊進行的實證醫學資料搜尋，目前於四個月前的嬰幼兒，並沒有證據顯示奶嘴使用對於母乳哺育有不良影響，因而建議可以依照母親的個人喜好與需求使用奶嘴。希望可以藉由安撫奶嘴的使用讓母親可以充分的休息。提供給您參考，希望有幫助。



醫療現況(實證醫學結果)

- 證據等級:GRADE高度建議
CEBM level 1
- 建議等級:於四個月前的嬰幼兒，並沒有證據顯示奶嘴使用對於母乳哺育有不良影響

病患的治療偏好

- 希望可以藉由安撫奶嘴的使用讓母親可以充分的休息
- 希望不要小朋友正常的母乳哺餵

利弊平衡

- 使用安撫奶嘴可讓母親獲得適當休息、減少嬰幼兒吸吮手指及減少嬰兒猝死綜合症
- 研究發現長時間吸奶嘴會稍微增加中耳炎、口腔念珠菌感染和蛀牙發生的機率。

費用資源

- 每個安撫奶嘴，費用每個約50-300元，有汗損須馬上更換，可顯著減少嬰幼兒哭鬧，讓照護者充分休息並打理其他家務，正確選用奶嘴也可以減少咬合不正的發生，成本遠低於後續治療矯正之費用。



感謝各位評審聆聽！

