



臺北市立萬芳醫院 - 委託財團法人臺北醫學大學辦理
Taipei Municipal Wan Fang Hospital (Managed by Taipei Medical University)



聽音樂是否能有效 增加產婦的乳汁分泌？

引言人：劉予臻護理師/周寶鈺護理長

日期：2023年4月25日



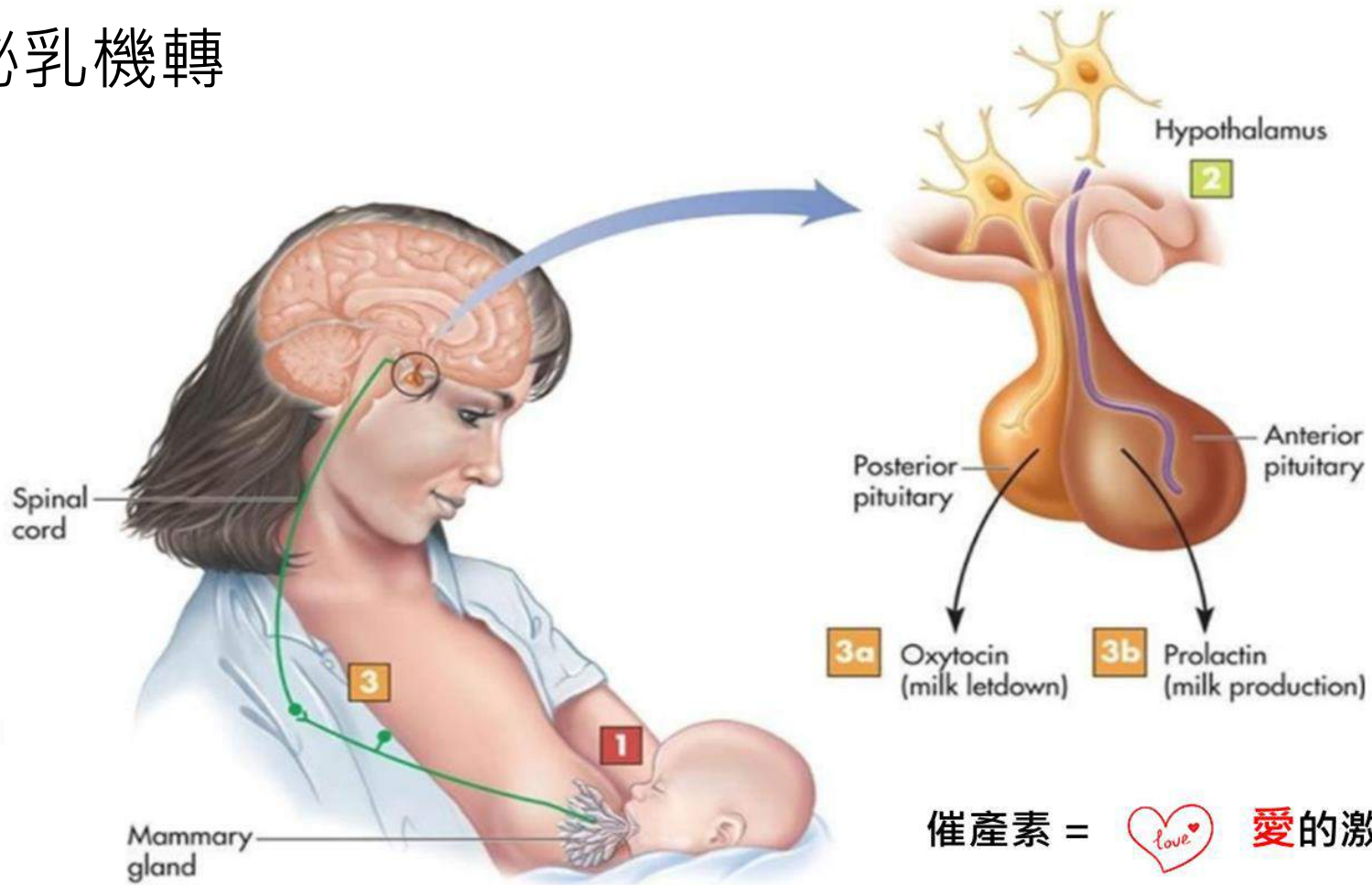
背景資料 Background Knowledge

- 母乳是嬰兒的最佳食物選擇，母乳中含有多種促進嬰兒發育的生長因子 (Lessen & Kavanagh, 2015; Victora et al., 2016; Donovan & Odle, 1994; Sharp et al., 2014)。
- 母乳哺育可降低母親罹患卵巢癌和乳腺癌風險以及嬰兒的發病率和死亡率，並降低醫療成本，和減少社會經濟負擔等 (Mosca & Gianni, 2017; Sharp et al., 2014 ; WHO, 2019)。
- 根據世界衛生組織(2021)統計營養不良導致2萬兒童死亡，佔所有兒童死亡的7%。嬰幼兒餵養是提高兒童生存率和促進健康成長發育的關鍵領域。
- 世衛組織和聯合國兒童基金會建議：
1.出生後1小時內儘早開始哺餵母乳。
2.出生後持續6個月的純母乳哺餵。
3.在6個月大時，引入營養充足和安全的補充（固體）食品，並繼續母乳餵養至2歲或以上。



背景資料 Background Knowledge

泌乳機轉



催產素 =  愛的激素

圖片取自：<https://www.mamaway.com/pregnancy-nursing-breastfeeding/4994/breastfeeding-knowledge/>

背景資料 *Background Knowledge*

- 產後情緒困擾會抑制排乳反射，從而導致母乳產量受到抑制，母乳產量減少，進而影響母乳哺餵的持續時間。
- 研究指出，一般可使用藥物和非藥物方法增加母乳產量，例如：按摩、熱敷、針灸、穴位按摩、瑜珈、芳香療法、袋鼠式護理、催乳劑、音樂療法.....等(Varisoğlu & Güngör Satılmış, 2019)。
- 『音樂療法』目前被運用於許多領域，例如心理健康、特殊教育、復健、疼痛管理、壓力、疲勞...等(Keith et al., 2012; Kittithanesuan et al., 2017; Yangöz & Özer, 2019)。
- 音樂療法作用-
 - 刺激催產素和內啡肽的釋放，因此有助於增加母乳量。
 - 擴張血管並改善內皮功能，幫助身體產生和釋放一氧化氮和內啡肽，減輕精神壓力和緊張。



★符合PICO ★年代最新 ★符合研究設計

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REVIEW



WILEY

The effects of music intervention on breast milk production in breastfeeding mothers: A systematic review and meta-analysis of randomized controlled trials

Mustafa Volkan Düzgün¹  | Zeynep Özer² 

期刊的影響係數及排名



2021 JOURNAL IMPACT FACTOR

3.057

[View calculation](#)

JOURNAL IMPACT FACTOR WITH CITATIONS

2.893

[View calculation](#)

Journal Citation Indicator (JCI)

1.32

The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in that category. It may be used alongside other metrics to help you evaluate journals. [Learn more](#)

Journal Impact Factor Trend 2021

Rank by Journal Impact Factor

Journals within a category are sorted in descending order by Journal Impact Factor for each category in which the journal is listed in JCR. Data for the most recent year is presented in chronological order. [Learn more](#)

EDITION
Science Citation Index Expanded (SCIE)

CATEGORY
NURSING
21/125

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE	
2021	21/125	Q1	83.60	
2020	9/124	Q1	88.45	
2019	6/123	Q1	95.53	
2018	13/120	Q1	89.58	
2017	7/118	Q1	94.49	

Rank by Journal Citation Indicator (JCI) ①

Journals within a category are sorted in descending order by Journal Citation Indicator (JCI) result for each category in which the journal is listed in JCR. Data for the most recent year is presented in chronological order. [Learn more](#)

CATEGORY
NURSING
16/182

JCR YEAR	JCI RANK	JCI QUARTILE	JCI PERCENTILE	
2021	16/182	Q1	91.48	
2020	7/181	Q1	96.41	
2019	5/180	Q1	97.50	
2018	4/175	Q1	98.00	
2017	4/175	Q1	98.00	





SR Appraisal sheets(FAITH)

Appraisal Tool

[系統性文獻回顧Systematic Review]

步驟1: 系統性文獻回顧探討的問題為何? (PICO)

步驟2: 系統性文獻回顧的品質如何? (內在效度)

步驟3: 結果為何? (效益)

步驟1: 系統性文獻回顧探討的問題為何？

P

- Breastfeeding mother
- 哺餵母乳的產婦

I

- music therapy
- 有聽音樂

C

- No music therapy
- 沒聽音樂

O

- Increase the effect of breast milk production
- 增加母乳分泌的成效

問題類型：●治療型 ○預後型 ○診斷型 ○傷害型



SR Appraisal sheets(FAITH)

Appraisal Tool

[系統性文獻回顧Systematic Review]

步驟1: 系統性文獻回顧探討的問題為何? (PICO)

步驟2: 系統性文獻回顧的品質如何? (內在效度)

步驟3: 結果為何? (效益)

FAITH - 研究是否找到(Find)所有的相關證據？

2 | METHODS

2.2 | Design

A systematic review and meta-analysis were conducted to assess the effect of music intervention on breast milk production. The study was presented according to Cochrane principles (Higgins et al., 2019) and registered in Prospero under protocol code CRD42020172246.

2.3 | Search methods

We performed a literature search in Web of Science, Science Direct, PubMed, MEDLINE, Cochrane Library, CINAHL, the Networked Digital Library of Theses & Dissertations, Ovid, and ProQuest without year limitation. The review period covered from January 1978 to March 2020. The search MeSH terms were breast milk, music intervention, and clinical trials and combinations of these words (Table S1).

The search strategy was carried out according to PICOS elements (Table 1). These elements included the patient population (P), interventions (I), comparison group (C), outcome (O), and study design (S) (JHiggins et al., 2019).

- 文獻搜尋超過二個主要的資料庫等(Web of Science, Science Direct, Pubmed, MEDLINE, Cochrane Library, CINAHL.....等)
- 時間從1978年1月至2020年3月
- 使用MeSH Term字串搜尋，關鍵字包括：(breast milk, music intervention, clinical trial)
- 納入標準及排除條件(Table 1)
- 在Prospero註冊，試驗登錄資料代碼為CRD42020172246無語言的限制
- 審查所有文獻的參考文獻清單(Table S2)

FAITH - 研究是否找到(Find)所有的相關證據？

納入/排除標準

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TABLE 1 Inclusion and Exclusion Criteria

The inclusion criteria	The exclusion criteria
Population: Targeted participants will be ≥ 18 years of age and breastfeeding mothers	Population: Non-breastfeeding mother
Intervention: Music intervention applied to increase the amount of milk	Intervention: Studies using more than two pharmacological and non-pharmacological interventions
Comparison: Music intervention group compared with routine care or no music intervention group	Comparison: Studies in which no musical interference is applied and compared with another pharmacological and non-pharmacological methods during music intervention.
Outcomes: Studies where the amount of breast milk is evaluated	Studies without a control group, even though music intervention.
Study design: Randomized controlled trials	Outcomes: Studies in which the amount of breast milk is not evaluated
	Study design: Non-randomized trials

FAITH - 研究是否找到(Find)所有的相關證據？

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2.4 | Search outcome

The literature review yielded 2,081 publications. First, duplicates and, then, unrelated articles (based on title and/or abstract) were removed. Finally, full-text articles that satisfied the inclusion criteria were reviewed and the remaining five articles were included in the study (Figure 1; Moher et al., 2009).

1. 資料庫初搜尋獲得文獻2081篇。
2. 刪除了重複文章及無關的文章，最終納入5篇文獻進行研究成果整合。(5篇RCT)

The risk of bias was judged on three levels: low risk of bias, some concerns, and high risk of bias (Figure 2).

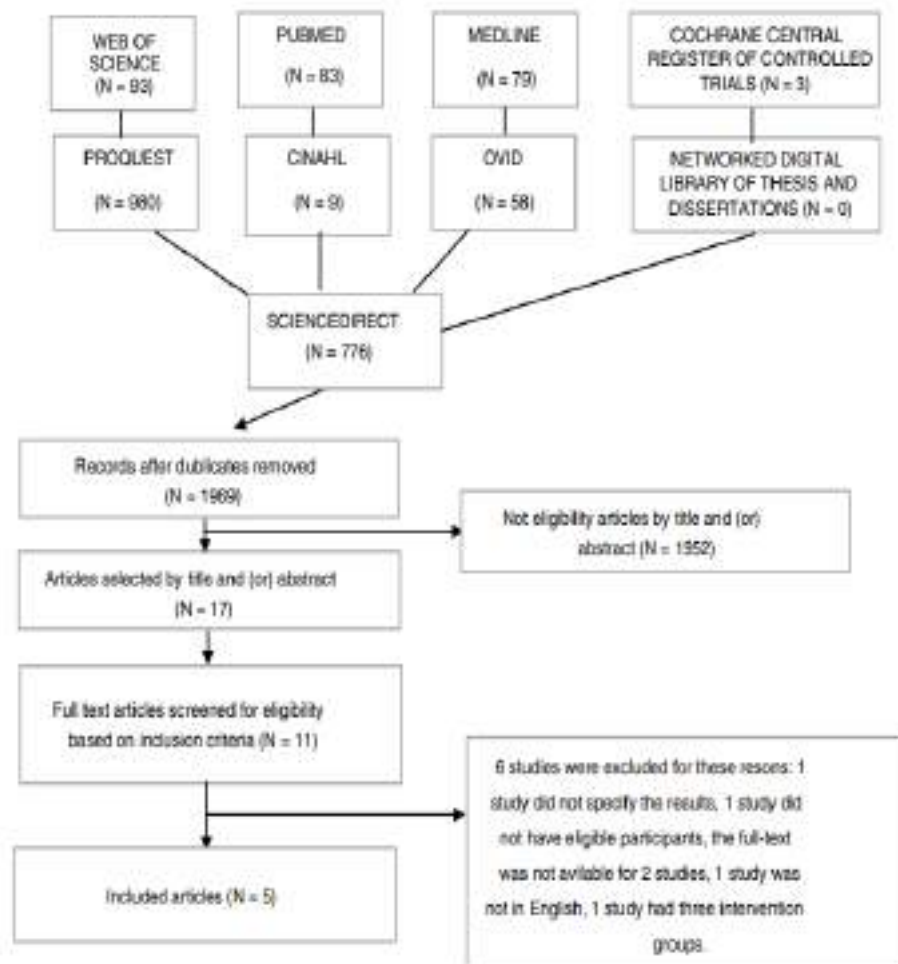


FIGURE 1 Flowchart of study identification [Colour figure can be viewed at wileyonlinelibrary.com]

Table S2 Characteristics of the Included Studies

Author, Year, Country ^{a,2}	Participants ^{a,2}	Type of Music and Intervention ^{a,3}	Duration and Frequency of Music and Number of Sessions ^{a,2}	Control Group ^{a,2}	Outcome Criteria ^{a,2}	Results ^{a,2}
	(P)	(I)		(C)	(O)	
Ak et al. (2015), Hindistan ^{a,2}	29 Mothers ^{a,2} Newborn baby ^{a,2} Music Group: 29 ^{a,2} Control Group: 29 ^{a,2}	Passive Listening ^{a,2} ^{a,2} Music played with the flute ^{a,2}	• Duration: 30 minutes ^{a,2} • Frequency: Twice a day, 4 days a week ^{a,2} • Number of Sessions: 8 sessions ^{a,2}	Group with No Music Intervention ^{a,2}	• The amount of breastmilk (ml) ^{a,2} ^{a,2}	The amount of breast milk of the experimental group with music intervention increased significantly compared with the control group ($p = 0.033$). ^{a,2}
Dabas et al. (2019), Hindistan ^{a,2}	57 Newb Mus Cont				estmilk	A significant increase in milk production was observed in the experimental group with music intervention ($p = 0.01$). ^{a,2}
Kittithanesuan et al. (2017), Tayland ^{a,2}	152 Newb Mus Cont				milk	In the music intervention group, a significant increase was observed in milk production compared with the control group ($p = 0.001$). ^{a,2}
Mohd Shukri et al. (2019), Malczya ^{a,2}	64 Newb Mus 33 ^{a,2} Control Group: 31 ^{a,2}	Image-supported relaxing music ^{a,2}	Number of Sessions: 14 sessions ^{a,2}		milk	In the experimental group, a significant increase in the amount of breast milk was observed ($p = 0.366$). ^{a,2}
Vianna et al. (2011), Brezilya ^{a,2}	94 Mothers ^{a,2} Newborn baby ^{a,2} Music Group: 48 ^{a,2} Control Group: 46 ^{a,2}	Passive and Active Listening ^{a,2} ^{a,2} Playing instruments and singing ^{a,2}	• Duration: 60 minutes ^{a,2} • Frequency: Once a day, three times a week ^{a,2} • Number of Sessions: 3 Sessions ^{a,2}	Standard Nursing Care ^{a,2}	• Breastfeeding rate ^{a,2} ^{a,2}	In the experimental group, a significant increase in the breastfeeding rate was observed ($p = 0.06$). ^{a,2}

共五篇RCT研究文獻：

- 年份：2011~2019
- 國家：印度*2、泰國*1、馬來西亞*1、巴西*1
- 研究對象：新生兒和媽媽
- 介入措施：主動/被動音樂
- 研究結果：乳汁量*4；哺乳率*1

FAITH - 研究是否找到(Find)所有的相關證據？

F - 研究是否找到 (Find) 所有的相關證據？

最好的狀況是？

良好的文獻搜尋至少應包括二個主要的資料庫 (如：Medline, Cochrane 考科藍實證醫學資料庫, EMBASE 等)，並且加上文獻引用檢索(參考文獻中相關研究、Web of Science, Scopus 或 Google Scholar)、試驗登錄資料等。文獻搜尋應不只限於英文，並且應同時使用 MeSH 字串及一般檢索詞彙(text words)。

我可以在哪裡找到這些資訊？

在文章的方法(Methods)章節，可以找到詳細搜尋策略的說明，包括使用的名詞，結果(Results)章節中可以找到本篇系統性文獻回顧評估的摘要及全文文獻數目、文獻納入與排除的數量及原因。資料可能會以圖表或 PRISMA 的流程圖呈現。



評讀結果：☒是 ☐否 ☐不清楚

FAITH - 文獻是否經過嚴格評讀(Appraisal) ?

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2.5 | Risk of bias and quality appraisal

Each of the two researchers assessed the risk of bias in the five randomized controlled trials using the Cochrane bias risk assessment tool. They used the following bias criteria (J. Higgins et al., 2019):

- Bias arising from the randomization process
- Bias due to deviations from intended interventions
- Bias due to missing outcome data
- Bias in measurement of the outcome
- Bias in the selection of the reported result
- Overall Bias

The risk of bias was judged on three levels: low risk of bias, some concerns, and high risk of bias (Figure 2).

3.3 | Risk of bias

Four of the trials had a sufficient selection bias (random sequence generation; Dabas et al., 2019; Kittithanesuan et al., 2017; Mohd Shukri et al., 2019; Vianna et al., 2011). One trial had an unclear risk of bias (Ak et al., 2015). All trials had a low risk of bias due to deviations from the music interventions (Dabas et al., 2019; Ak et al., 2015; Kittithanesuan et al., 2017; Mohd Shukri et al., 2019; Vianna et al., 2011).

In all trials, the missing data were due to attrition bias (withdrawal) or exclusion and were regarded as low risk. Dropout rate analysis was used to assess the risk of attrition bias (Gebauer et al., 2014). According to Schulz and Grimes (2002), a dropout rate higher than 20% indicates a high risk of attrition bias. Therefore, the trials with a dropout rate lower than 20% had a low risk of attrition bias. All trials had a low risk of detection bias and selection bias (Dabas et al., 2019; Ak et al., 2015; Kittithanesuan et al., 2017; Mohd Shukri et al., 2019; Vianna et al., 2011). Overall, four trials had a low risk of bias (Dabas et al., 2019; Kittithanesuan et al., 2017; Mohd Shukri et al., 2019; Vianna et al., 2011), whereas one had an unclear risk of bias (Ak et al., 2015).

- 以 the Cochrane bias risk assessment tool. 評估
五項隨機對照試驗的偏倚風險

FAITH - 文獻是否經過嚴格評讀(Appraisal) ?

A - 文獻是否經過嚴格評讀 (Appraisal) ?

最好的狀況是？	我可以在哪裡找到這些資訊？
應根據不同臨床問題的文章類型，選擇適合的評讀工具，並說明每篇研究的品質(如針對治療型的臨床問題，選用隨機分配、盲法、及完整追蹤的研究類型)。	在文章的方法章節，可以找到所使用的文獻品質評讀標準的描述，而結果章節則會列出每篇研究品質的評讀結果。



評讀結果：☒是 ☐否 ☐不清楚

FAITH - 文獻是否只納入(included)具良好效度的文章？

2.5 | Risk of bias and quality appraisal

Page 3309

Each of the two researchers assessed the risk of bias in the five randomized controlled trials using the Cochrane bias risk assessment tool. They used the following bias criteria (J. Higgins et al., 2019):

- Bias arising from the randomization process
- Bias due to deviations from intended interventions
- Bias due to missing outcome data
- Bias in measurement of the outcome
- Bias in the selection of the reported result
- Overall Bias

The risk of bias was judged on three levels: low risk of bias, some concerns, and high risk of bias (Figure 2).

- 兩位研究人員進偏倚風險的評估
- 偏倚風險依據三個級別判斷：低風險、不明風險及高風險。

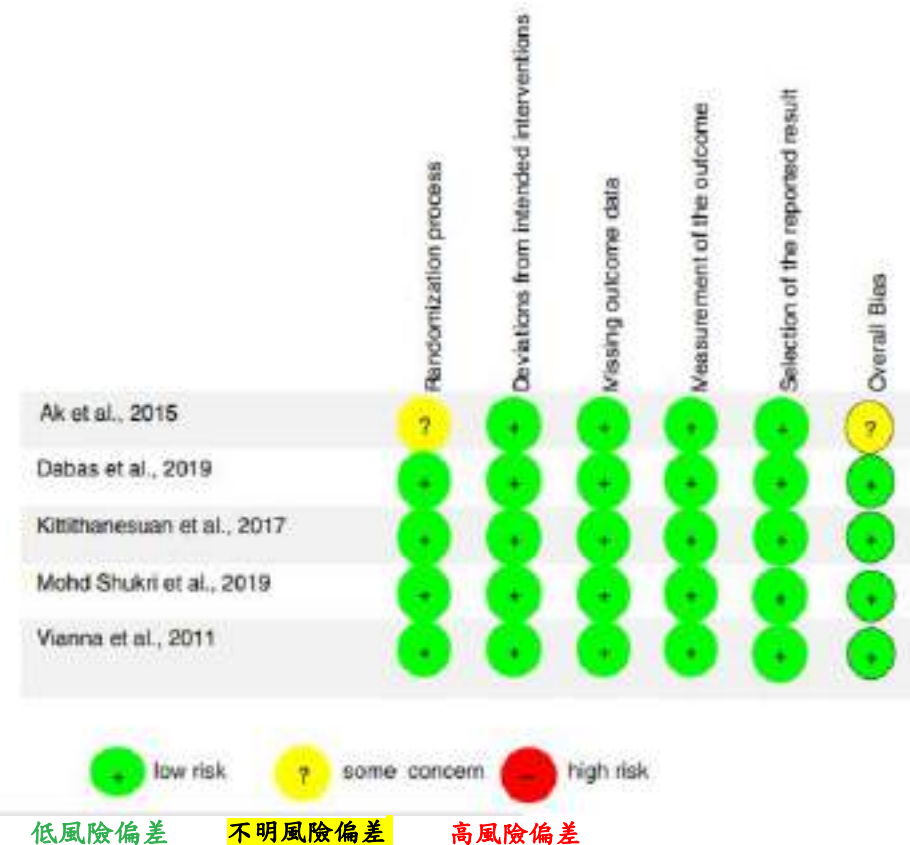


FIGURE 2 (a) Risk of bias summary (b) Risk of bias graph [Colour figure can be viewed at wileyonlinelibrary.com]

FAITH - 文獻是否只納入(included)具良好效度的文章？

I - 是否只納入 (Included) 具良好效度的文章？

最好的狀況是？	我可以在哪裡找到這些資訊？
僅進行文獻判讀是不足夠，系統性文獻回顧只納入至少要有一項研究結果是極小偏誤的試驗。	在文章的方法章節，可以找到文章評估的方式，以及是由誰完成評估的，在結果章節則會提供審查者意見一致性的程度。



評讀結果：☒是 ☐否 ☐不清楚

FAITH-作者是否以表格和圖表「總結」(total up)試驗結果？
FAITH-試驗的結果是否相近-異質性 (Heterogeneity)？

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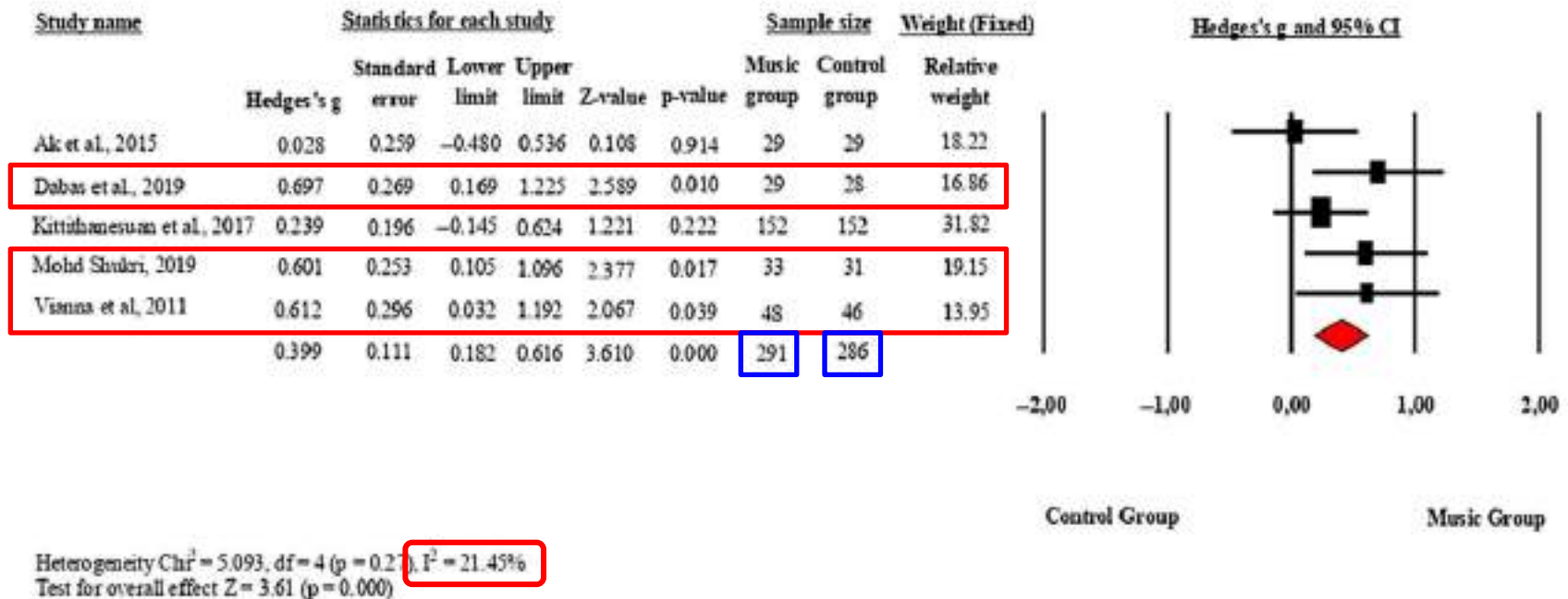


FIGURE 3 The results of the meta-analysis of the effect of music interventions on breast milk. [Colour figure can be viewed at wileyonlinelibrary.com]

音樂干預對母乳影響的研究結果顯示：音樂是一種可用於增加母乳產量的方法



Author, Year, Country [↵]	Participants [↵]	Type of Music and Intervention [↵]	Duration and Frequency of Music and Number of Sessions [↵]	Control Group [↵]	Outcome Criteria [↵]	Results [↵]
Ak et al. (2015), Hindistan[↵]	29 Mothers [↵] Newborn baby [↵] Music Group: 29 [↵] Control Group: 29 [↵]	Passive Listening [↵] ↵ Music played with the flute [↵]	• Duration: 30 minutes[↵] • Frequency: Twice a day, 4 days a week[↵] • Number of Sessions: 8 sessions[↵]	Group with No Music Intervention [↵]	• The amount of breastmilk (ml)[↵]	The amount of breast milk of the experimental group with music intervention increased significantly compared with the control group ($p = 0.033$). [↵]
Dabaş et al. (2019), Hindistan[↵]	57 Mothers [↵] Newborn baby [↵] Music Group: 29 [↵] Control Group: 28 [↵]	Passive Listening [↵] ↵ An audio assisted relaxation technique with a laptop [↵]	• Duration: 30 minutes[↵] • Frequency: Once a day, for 10 days[↵] • Number of Sessions: 10 sessions[↵]	Standard Nursing Care [↵]	• The amount of breastmilk (ml)[↵]	A significant increase in milk production was observed in the experimental group with music intervention ($p = 0.01$). [↵]
Kutithanesuan et al. (2017), Tavland[↵]	152 Mothers [↵] Newborn baby [↵] Music Group: 152 [↵] Control Group: 152 [↵]	Passive Listening [↵] ↵ Regional music with cd player [↵]	• Duration: 11 minutes[↵] • Frequency: Once[↵] • Number of Sessions: 1 session[↵]	Standard Nursing Care [↵]	• The amount of breastmilk (drop)[↵]	In the music intervention group, a significant increase was observed in milk production compared with the control group ($p = 0.001$). [↵]
Mohd Shukri et al. (2019), Malezya[↵]	64 Mothers [↵] Newborn baby [↵] Music Group: 33 [↵] Control Group: 31 [↵]	Passive Listening [↵] ↵ Image-supported relaxing music [↵]	• Duration: Unspecified[↵] • Frequency: Once a day for 2 weeks - Number of Sessions: 14 sessions[↵]	Standard Nursing Care [↵]	• The amount of breastmilk (ml)[↵]	In the experimental group, a significant increase in the amount of breast milk was observed ($p = 0.366$). [↵]
Vianna et al. (2011), Brezilya[↵]	94 Mothers [↵] Newborn baby [↵] Music Group: 48 [↵] Control Group: 46 [↵]	Passive and Active Listening [↵] ↵ Playing instruments and singing [↵]	• Duration: 60 minutes[↵] • Frequency: Once a day, three times a week[↵] • Number of Sessions: 3 Sessions[↵]	Standard Nursing Care [↵]	• Breastfeeding rate[↵]	In the experimental group, a significant increase in the breastfeeding rate was observed ($p = 0.06$). [↵]

Table S2 Characteristics of the Included Studis[↵]

Original Article

Impact of audio assisted relaxation technique on stress, anxiety and milk output among postpartum mothers of hospitalized neonates: A randomized controlled trial

Suman Dabas^{a,*}, Poonam Joshi^b, Ramesh Agarwal^b, Raj Kumar Yadav^c, Garima Kachhawa^d
^a Department of Pediatrics, All India Institute of Medical Sciences, New Delhi, India

^b College of Nursing, All India Institute of Medical Sciences, New Delhi, India

^c Department of Physiology, All India Institute of Medical Sciences, New Delhi, India

^d Department of Obstetrics and Gynecology, All India Institute of Medical Sciences, India

● 研究對象：產後哺乳媽媽/入住NBC寶寶(早產26-33週)

● 介入措施：

-實驗組(n=29)：瑜珈治療師指導下，每天一次，維持30分鐘，持續10天的音樂輔助放鬆技巧(包括深呼吸(5分鐘)、[Suksham Vyayam](#)(8分鐘)、[Anulom Vilom](#)(5分鐘)、[Brahmari](#)(5分鐘)、漸進式肌肉放鬆(PMR)(5分鐘)和深呼吸(2分鐘)。)

-對照組(n= 28)：常規護理

● 結果：在10天後評估放鬆技術對母親的壓力和焦慮以及產奶量的影響

Table 4

Milk output among postpartum mothers of hospitalized neonates after 10 days of enrollment in experimental and control group.

	Experimental group (n = 25)	Control group (n = 25)	p value ^a
Milk output mL (mean ± SD)	69.2 ± 19.3	54.1 ± 22.5	0.01*

* $p < 0.05$, ^aIndependent t-test.


Randomized controlled trial investigating the effects of a breastfeeding relaxation intervention on maternal psychological state, breast milk outcomes, and infant behavior and growth

Nurul Husna Mohd Shukri,^{1,2} Jonathan Wells,² Simon Eaton,² Firdaus Mukhtar,¹ Ana Petelin,³ Zala Jenko-Pražnikar,³ and Mary Fewtrell²

¹Faculty of Medicine & Health Sciences, Universiti Putra Malaysia, Selangor, Malaysia; ²UCL Great Ormond Street Institute of Child Health, University College London, London, United Kingdom; and ³Faculty of Health Sciences, University of Primorska, Koper, Slovenia

● **研究對象**：初產母乳喂養的母親和足月嬰兒

● **介入措施**：

-實驗組(n=33)：每天一次，持續兩週(14天)的音樂輔助放鬆技巧(圖像式的輕音樂)

-對照組(n= 31)：常規護理

● **結果**：

-在產後出院第2週、第6週、第12週及第14週評估評估產婦壓力和焦慮、母乳攝入量和乳皮質醇以及嬰兒行為和成長。

-RG 嬰兒在 HV3 時的平均母乳攝入量高出 227 克/天控制性別後比 CG 嬰兒 (P = 0.031) 和 HV1 的母乳攝入量。

TABLE 3 Breast-milk intake of the intervention and control groups at HV1 and HV3¹

	Control group (n = 11)	Relaxation group (n = 8)	P value	Mean difference	95% CI
Milk intake, g/d					
HV1	534.1 ± 169	557.8 ± 148	0.756	23.65	-134, 181
HV3	741.8 ± 384	886.8 ± 251	0.164	144.94	-65.3, 355
Difference HV3-HV1	207.7 ± 300	329 ± 250	0.366	121.3	-154.5, 397

¹Values are means ± SDs. Group comparison was performed with an independent t-test. HV, home visit.





Music therapy may increase breastfeeding rates among mothers of premature newborns: a randomized controlled trial

Martha N. S. Vianna,¹ Arnaldo P. Barbosa,² Albelino S. Carvalhaes,² Antonio J. L. A. Cunha²

● **研究對象**：體重 $\leq 1,750$ g 的早產兒的母親

● **介入措施**：

-實驗組(n=48)：每天一次，每次維持60分鐘，每週三次，彈奏樂器和唱歌

-對照組(n= 46)：常規護理

● **結果**：在實驗組中，觀察到
 母乳哺餵率顯著增加(P=0.06)

Table 3 • Breastfeeding rates among mothers of premature newborns, in the intervention and control groups, in different times after delivery

Variable	MTG*	CG*	RR (95%CI)	p	NNT
At the time of the infant hospital discharge					
Any breastfeeding	42 (88)	33 (72)	1.22 (0.99-1.51)	0.06	6.3
Non-breastfeeding	6 (12)	13 (28)			
At first follow-up visit					
Any breastfeeding	42 (88)	32 (70)	1.26 (1.01-1.57)	0.03	5.6
Non-breastfeeding	6 (12)	14 (30)			
At 30-day follow-up visit					
Any breastfeeding	38 (79)	30 (65)	1.21 (0.73-5.66)	0.13	7.1
Non-breastfeeding	10 (21)	16 (35)			
At 60-day follow-up visit					
Any breastfeeding	36 (75)	27 (59)	1.28 (0.95-1.71)	0.09	6.3
Non-breastfeeding	12 (25)	19 (41)			

95%CI = 95% of confidence interval; CG = control group; MTG = music therapy group; NNT = number needed to treat; RR = relative risk.

* Values are expressed as n (%).



FAITH-作者是否以表格和圖表「總結」(total up)試驗結果？
FAITH-試驗的結果是否相近-異質性 (Heterogeneity)？

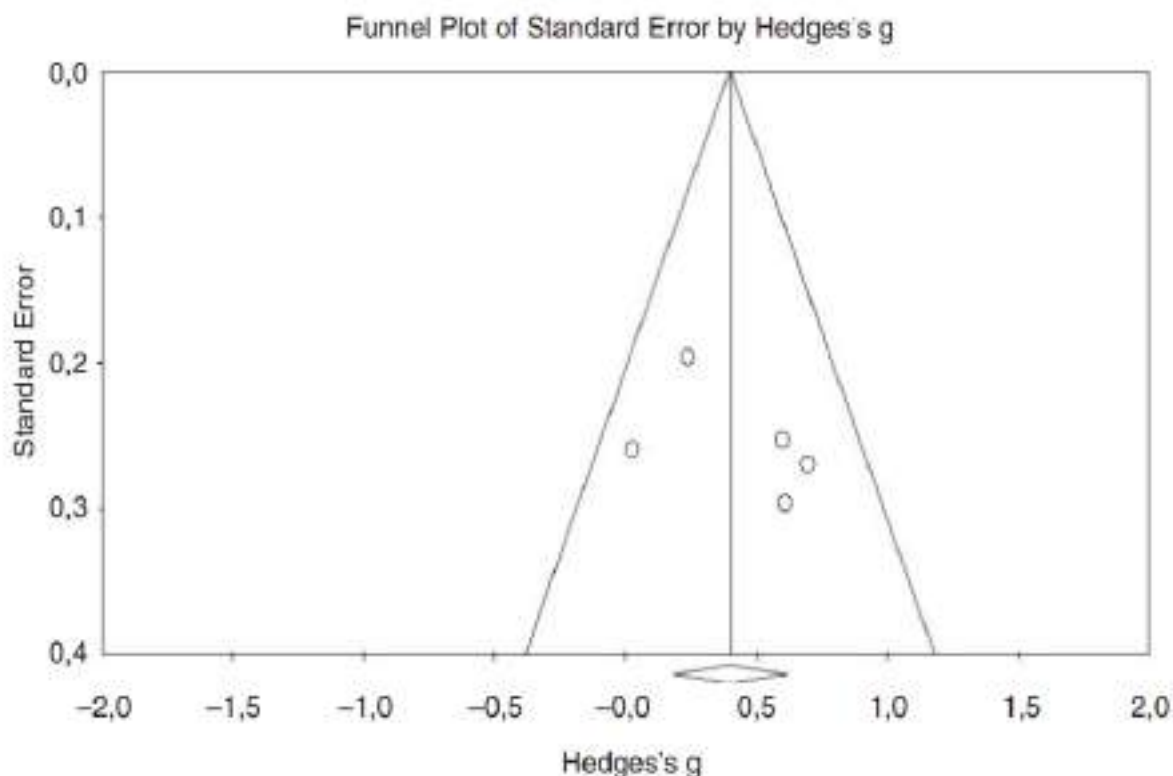


FIGURE 4 Effect of music intervention on breast milk: Funnel plot

- Our results show that music has a small effect on breast milk production (Hedge's $g = 0.39$)

study less than 0.05. The Begg and Mazumdar test using Kendall's tau with continuity correction ($\tau = 0.20$, $Z = 0.48$, $p = .312$) and Egger's test ($t = 1.03$, $p = .018$) did not show any significant bias.

FAITH-作者是否以表格和圖表「總結」(total up)試驗結果？ FAITH-試驗的結果是否相近-異質性 (Heterogeneity)？

4 | DISCUSSION

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Population, intervention, and outcomes affect heterogeneity (Gartlehner et al., 2012; Zhou & Dendukuri, 2014). The trials had low heterogeneity, as they had similar populations, interventions, sample sizes, and outcomes (breast milk production only; Gartlehner et al., 2012; Zhou & Dendukuri, 2014)). Subgroup, meta-regression, and moderator analyses can be used to determine sources of heterogeneity in a meta-analysis (Bigby, 2014; Cornell et al., 2017). However, the number of randomized controlled trials should be at least 10 to conduct meta-regression (Bigby, 2014). In this study, meta-regression was not performed because the sample consisted only of five randomized controlled trials.

- 族群、介入措施、結果會影響異質性
- 本試驗為低異質性，因為他們有相似的族群、介入措施、樣本大小和結果



FAITH-作者是否以表格和圖表「總結」(total up)試驗結果？
FAITH-試驗的結果是否相近-異質性 (Heterogeneity)？

T - 作者是否以表格和圖表「總結」(Total up) 試驗結果？

最好的狀況是？	我可以在哪裡找到這些資訊？
應該用至少 1 個摘要表格呈現所納入的試驗結果。若結果相近，可針對結果進行統合分析 (meta-analysis)，並以「森林圖」(forest plot) 呈現研究結果，最好再加上異質性分析。	在文章的結果章節，可以找到摘要的圖表，以及作畫對系統性文獻回顧結果的解釋。



評讀結果：✓是 ☐否 ☐不清楚

H - 試驗的結果是否相近 - 異質性 (Heterogeneity)？

最好的狀況是？	我可以在哪裡找到這些資訊？
在理想情況下，各個試驗的結果應相近或具同質性。若具有異質性，作者應評估差異是否顯著 (卡方檢定)。根據每篇個別研究中不同的 PICO 及研究方法，探討造成異質性的原因。	在文章的結果章節，可以找到研究結果是否具異質性，及造成異質性可能的原因探討。森林圖中可以找到異質性的卡方檢定結果。

評讀結果：✓是 ☐否 ☐不清楚



總評(Summary)

系統性文獻回顧品質如何(FAITH)

F - 研究是否找到 (Find) 所有的相關證據？

YES

A - 文獻是否經過嚴格評讀 (Appraisal)？

YES

I - 是否只納入 (included) 具良好效度的文章？

YES

T - 作者是否以表格和圖表「總結」(total up) 試驗結果？

YES

H - 試驗的結果是否相近 - 異質性 (Heterogeneity)？

YES



SR Appraisal sheets(FAITH)

Appraisal Tool

[系統性文獻回顧Systematic Review]

步驟1: 系統性文獻回顧探討的問題為何? (PICO)

步驟2: 系統性文獻回顧的品質如何? (內在效度)

步驟3: 結果為何? (效益)

結果為何？

- 本篇系統性文獻回顧和統合分析評估了音樂對母乳分泌的影響，並**提供A級證據**。
- 五項隨機對照試驗的結果證明，**音樂是一種可用於增加母乳量的有效方法**。
- 護理人員可以**提供**母乳哺餵的媽媽使用**音樂介入**來幫助她們**增加母乳產量**。
- **音樂介入**還可以減輕母親和嬰兒的壓力，提高母乳哺育率。



研究優勢與限制

4.1 | Strengths and limitations

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This study has three strengths. First, this is the first comprehensive meta-analysis systematic review to investigate the effect of music intervention on breast milk production. Second, it employed a comprehensive review protocol based on Cochrane principles. Third, the researchers screened a large number of electronic databases meticulously and complied with Cochrane principles to minimize bias.

The study has one limitation the number of trials was too small to conduct a meta-regression analysis and, therefore, more trials are warranted.

● 優勢：

- 這是第一個以『音樂介入』對母乳產生的影響進行全面性的文獻回顧和統合分析的研究。
- 採用Cochrane原則的全面審查。
- 研究人員篩選了大量電子資料庫，並遵循Cochrane原則，儘量減少偏倚。

● 限制：研究個案數太少，無法進行多元回歸分析(meta-regression analysis)



臨床現況/專家意見



討論：臨床應用

- 是否**同意**「**聽音樂(音樂療法)**」用於哺乳媽媽以促進乳汁的分泌？



■ 同意： 18 人 ■ 不同意： 0 人 ■ 再評估： 4 人



感謝聆聽!

