

## ACUPRESSURE IN REDUCING POSTPARTUM PAIN: A SCOPING REVIEW

*Akupresur dalam Mengurangi Nyeri Postpartum: Scoping Review*

**Nurhayati Setiawan<sup>1</sup>, Ahmad Rizal<sup>2</sup>, Wiryawan Permadi<sup>3</sup>, Aisya Astri Yunas<sup>1</sup>,  
Shilvia Shilvia<sup>1</sup>, Qorinah Estiningtyas Sakilah Adnani<sup>4</sup>, Hadi Susiarno<sup>3</sup>**

<sup>1</sup>Magister Kebidanan, Fakultas Kedokteran, Universitas Padjadjaran, Bandung, Indonesia

<sup>2</sup>Departemen Syaraf, Fakultas Kedokteran, Universitas Padjadjaran, Bandung, Indonesia

<sup>3</sup>Departemen Obstetri dan Ginekologi, Fakultas Kedokteran, Universitas Padjadjaran, Bandung, Indonesia

<sup>4</sup>Departemen Ilmu Kesehatan Masyarakat, Fakultas Kedokteran, Universitas Padjadjaran, Bandung, Indonesia

\*Email: izaoy@gmail.com

### ABSTRAK

*Nyeri postpartum merupakan tantangan umum yang dihadapi ibu pasca persalinan, sering kali memengaruhi kesejahteraan fisik dan emosional. Pendekatan nonfarmakologis, seperti akupresur, semakin diminati sebagai alternatif untuk mengurangi ketergantungan pada obat-obatan. Penelitian ini bertujuan untuk mengetahui bagaimana akupresur dalam mengurangi nyeri postpartum. Metode yang digunakan adalah analisis literatur yang melibatkan studi-studi terdahulu mengenai pengaruh akupresur dalam mengurangi nyeri postpartum. Metode penelitian yang digunakan adalah pendekatan scoping review dengan menggunakan kriteria inklusi dan eksklusi tertentu. Data dikumpulkan dari berbagai mesin pencarian artikel diantaranya Pubmed 24 artikel, Google Scholar 461 artikel, Science Direct 147 artikel, dan Scopus 47 artikel yang relevan dengan topik yang sama, dan sintesis data dilakukan terhadap 10 artikel yang memenuhi kriteria inklusi. Yang kemudian dianalisis dengan checklist Joanna Briggs Institue (JBI) for RCT melalui proses Critical Appraisal. Hasil penelitian menunjukkan bahwa dari 10 artikel tersebut 5 studi memiliki kualitas tinggi dan 5 studi dengan kualitas sedang. Serta penggunaan akupresur efektif dalam mengurangi nyeri postpartum. Dengan menargetkan titik-titik akupresur tertentu seperti LI4, SP6, LV4, P6, ST 36, BL23, BL25, BL26, dan BL40. Akupresur merupakan metode nonfarmakologis yang mampu mengurangi nyeri postpartum. Hasil ini memberikan dukungan terhadap integrasi akupresur dalam perawatan postpartum sebagai alternatif yang aman dan alami bagi ibu yang ingin mengurangi penggunaan obat-obatan. Dengan demikian, akupresur dapat menjadi bagian yang berharga dalam merawat ibu postpartum, membantu meningkatkan kualitas perawatan dan kesejahteraan ibu serta bayi mereka.*

**Kata kunci:** akupresur, nyeri, postpartum

### ABSTRACT

Postpartum pain is a common challenge faced by mothers after childbirth, often affecting both physical and emotional well-being. Non-pharmacological approaches, such as acupressure, are increasingly gaining attention as alternatives to reduce dependence on medication. The study aimed to ascertain the mechanism by which acupressure alleviates postpartum discomfort. The methodology employed entailed a comprehensive review of existing literature, specifically focusing on prior studies investigating the efficacy of acupressure in alleviating post-partum pain. The study methodology employed is a scoping review approach with defined criteria for inclusion and exclusion. Information was gathered from various websites, including Pubmed 24 articles, Google Scholar 461 articles, Science Direct 147 articles, and Scopus 47 articles pertaining to the same subject, and a data synthesis process was conducted on 10 papers that

satisfied the requirements for inclusion. Which was then analyzed using the Joanna Briggs Institute (JBI) checklist for RCTs through a Critical Appraisal process. The results showed that among the 10 articles, 5 studies were of high quality and 5 studies were of moderate quality. indicate that utilising acupressure is efficacious in diminishing postpartum discomfort. Acupressure has effectively alleviated postpartum pain by focusing on particular acupressure points, including LI4, SP6, LV4, P6, ST 36, BL23, BL25, BL26, and BL40. This non-pharmacological method offers a practical solution for pain relief. The results endorse the incorporation of acupressure in postnatal care as a secure and organic substitute for moms who desire to minimise their reliance on medication. Acupressure can play a significant role in the postpartum care of mothers, enhancing the quality of care and the overall well-being of both mothers and their babies.

**Keywords:** acupressure, pain, postpartum

## INTRODUCTION

The postpartum period begins after the placenta is delivered and ends when the reproductive organs return to their pre-pregnancy state, which lasts about six week[1]. During this time, the mother may experience problems, one of which is postpartum pain.[2]Postpartum pain can range from mild to severe, including pain after vaginal delivery or Caesarean section (CS). Postpartum pain can be caused by various factors, including uterine contractions during uterine involution, breast engorgement, birth canal injuries, and suture wounds in mothers who have had a CS. Postpartum pain is a condition that mothers may experience after giving birth and can affect their quality of life and postpartum care[3], [4].

Various methods have been developed and tested to reduce postpartum pain, including pharmacological and non-pharmacological approaches.[5]One interesting non-pharmacological approach is acupressure. Acupressure is a traditional Chinese healing method that uses the fingers or a non-invasive instrument to apply pressure to acupuncture points on the skin's surface[6], [7], [8]. Acupressure can reduce pain, help maintain the body's internal balance, boost the immune system, and provide a sedative/psychological effect[9]. Acupressure application provides analgesic effects by stimulating the release of opioids and sedative, homeostatic, and psychological effects, as well as by increasing the release of neurohormones and neurotransmitters, and is used in symptom management[2] Acupressure is an alternative medicine technique that has been proven to be beneficial in reducing pain in various medical conditions[10].

In this context, this study aims to investigate the effect of acupressure on postpartum pain reduction. This is because numerous reviews on acupressure for labor pain reduction exist, but few focus on postpartum pain, particularly after vaginal delivery and post-cesarean delivery. The primary objective of this study is to determine whether acupressure can be an effective and safe alternative in postpartum pain management, as well as to highlight the clinical and practical aspects of its application.

The results of this review are expected to significantly contribute to our understanding of the role of acupressure in postpartum pain management. Thus, this review can provide a basis for developing more effective and holistic intervention strategies in postpartum care. Furthermore, this review can provide an empirical basis for healthcare practitioners to consider the use of acupressure as part of a comprehensive therapeutic approach to postpartum maternal care.

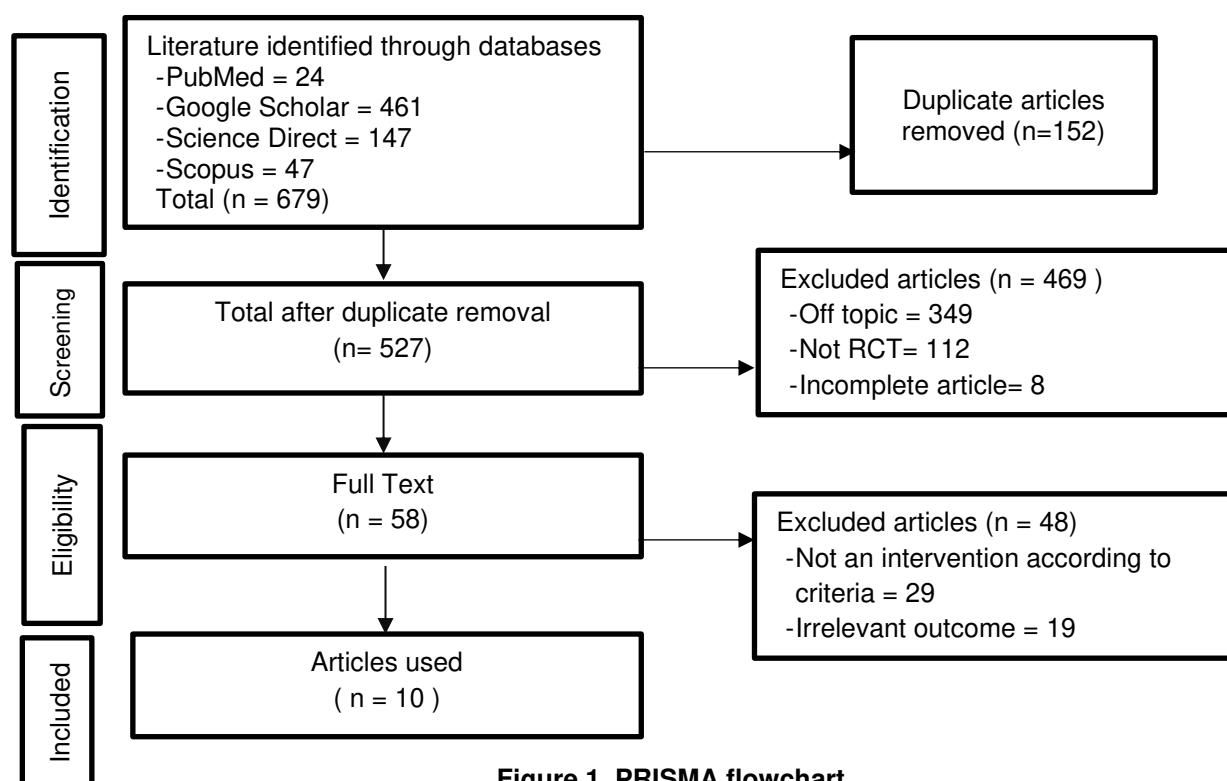
## METHODS

This study used a scoping review method based on the PRISMA-ScR guidelines. This design is used to identify and map relevant evidence according to predetermined inclusion criteria related to the topic, field, context, concept, or issue being reviewed. This study focuses on the synthesis of scientific evidence. In its implementation, this scoping review follows the framework of Arksey and O'Malley which consists of several stages,

namely: identifying the research question, identifying relevant articles, selecting and determining the studies to be used, mapping the data, and compiling, summarizing, and reporting the results obtained[11].

This method allows for comprehensive analysis and answers specific questions, by collecting and summarizing various related research sources. At the identification stage regarding the research question, the researcher uses it as a reference in searching for articles[12]. The question in this scoping review research is "HowpWhat is the effect of acupressure in reducing postpartum pain? FIn this study, the researcher used Population, Exposure, and Outcome (PEO) to determine the literature search keywords. The population studied was postpartum mothers, the exposure discussed was acupressure, and the outcome was postpartum pain reduction.

The author narrows the scope of the literature materialso thatThis study can be more focused and aligned with the research topic by determining inclusion and exclusion criteria. The inclusion criteria used included research articles published between 2019 and 2024, in English, full-text articles, and a Randomized Controlled Trial (RCT) design. The exclusion criteria included books, blogs, and articles with paid full-text access. The keywords used were "acupressure" AND "pain" AND "postpartum."



**Figure 1. PRISMA flowchart**

The author screened the literature obtained from various article search engines using previously defined keywords. A total of 679 articles were obtained. Articles were retrieved with details from each search engine: 24 articles from PubMed, 461 articles from Google Scholar, 147 articles from Science Direct, and 47 articles from Scopus. The articles were then entered into Mendeley, resulting in 152 duplicate articles. Articles were screened based on title and abstract, with 469 being irrelevant. Fifty-eight articles were accessed for full-text review and filtered according to the criteria. Ten articles were then entered into the data chart, which was extracted and evaluated using critical appraisal. The article search process can be seen in PRISMA flowchart in Figure 1

## RESULT

The literature search results showed that most of the studies on acupressure in

reducing postpartum pain that met the inclusion criteria came from developing countries, namely Turkey and Iran, with a primary focus on postpartum mothers experiencing pain after vaginal delivery or post-cesarean section. The selected articles were then mapped and entered into a table explaining the title, objectives, methods, research instruments, and research results of the 10 synthesized articles.

**Table 1. Review Article Data Synthesis**

No	Author/ Country	Objective	Method	Research Instruments	Research result
1	Sena Dilek Aksoy, et. al. (2023). Acupressure application to relieve postpartum uterine pain during breastfeeding: A randomized controlled study. Türkiye	To evaluate the effectiveness of acupressure application (LI4 and SP6, 2 minutes per point bilaterally) in reducing postpartum uterine pain during breastfeeding.	<i>Prospective randomized controlled trial</i> (RCT) Sample: 125 multiparous women (62 acupressure group and 63 control group)	Personal information form and Visual Analog Scale (VAS) (before, 10th minute and 20th minute of breastfeeding)	The average VAS scores of the acupressure and control groups were $5.59 \pm 2.16$ and $5.35 \pm 2.32$ before breastfeeding, $5.30 \pm 2.71$ and $6.23 \pm 2.75$ at 10 minutes of breastfeeding, and $4.98 \pm 2.97$ and $6.34 \pm 3.14$ at 20 minutes before breastfeeding. Thus, pain scores decreased significantly at 20 minutes of breastfeeding compared to before breastfeeding ( $p < 0.001$ ). Conversely, in the control group, pain scores increased significantly at 10 and 20 minutes ( $p < 0.001$ ).[13]
2	Saba Mohamad Ghasem-Nejad Maleki, et. al. (2024). The comparison of effectiveness of acupressure on Spleen 6 and Hugo points on the severity of postpartum pain: A randomized clinical trial.Iran	Comparing the effectiveness of acupressure at points SP6 and LI4 on reducing postpartum pain levels	<i>Parallel randomized trial study</i> , Sample: 68 primiparous women who gave birth vaginally	Demographic questionnaire and VAS (before, immediately after ( $\leq 5$ minutes), and 1 hour after the intervention).	LI4 and SP6 acupressure interventions reduced postpartum pain in all periods ( $p < 0.001$ ) namely $7.79 \pm 1.20$ and $7.18 \pm 1.23$ before intervention, $5.79 \pm 1.69$ and $6.33 \pm 1.26$ after intervention, $4.56 \pm 1.60$ and $4.61 \pm 1.44$ 1 hour after intervention. Although there was a significant difference in pain intensity between groups before intervention ( $p = 0.039$ ). There were no significant side effects during the study.[14]
3	Ayça Şolt Kirca, Derya Kanza Gul (2020).The effect of acupressure applied to points LV4 and LI4 on perceived acute postpartum perineal pain after vaginal birth with episiotomy: a randomized controlled study.Türkiye	To evaluate the effectiveness of applying acupressure (LV4 and LI4) for 10 minutes in relieving perineal pain (post episiotomy) and the analgesic effect was maintained for up to 120 minutes.	<i>Randomized controlled trial</i> Sample: 120 mothers (40 acupressure group, 40 ice pack compress, 40 control group)	Mother information form, VAS was assessed before the procedure (VAS1) and after the procedure at 1 minute (VAS 2), 30 minutes (VAS3), 60 minutes (VAS4), and 120 minutes (VAS5).	Each method (acupressure, ice pack, and control group) was evaluated for 30 minutes (VAS3), 60 minutes (VAS4), and 120 minutes (VAS5). Comparing these three methods, acupressure significantly reduced pain after application (VAS3 $3.20 \pm 1.28$ vs. $3.77 \pm 1.27$ vs. $4.82 \pm 0.93$ , VAS4 $2.65 \pm 1.33$ vs. $3.5 \pm 1.37$ vs. $4.62 \pm 0.97$ , VAS5 $2.02 \pm 1.44$ vs. $3.5 \pm 1.37$ vs. $4.57 \pm 0.93$ , $p < 0.05$ )[15].
4	Shahla Afravi, et. al. (2019). The effect of Hugo point	To evaluate the effect of pressure on Hugo's point	<i>Randomized controlled trial</i> Sample:	Questionnaire and VAS	Hugo pressure (LI4) significantly reduced pain at 2 hours postpartum ( $p < 0.001$ ).

	pressure on postpartum pain in multiparous women.Iran	(LI4) for 20 minutes on postpartum pain in multiparous women.	62 multiparous women (31 acupressure group, 31 control group)		However, at hours 4, 6, and 8, the difference between groups was not significant ( $p > 0.05$ ).[16]
5	Cheng, H.U., Shieh, C., et. al. (2019). <i>A randomized controlled pilot study: The effects of acupressure on postpartum low back pain, salivary cortisol, physical limitations, and depression.</i> China	evaluated the effects of acupressure (points BL23, BL25, BL26, BL40, SP6) on postpartum low back pain, salivary cortisol levels, physical limitations, and depression.	<i>Randomized controlled pilot study</i>  Sample: 70 postpartum mothers (35 intervention group, 35 control group)	VASE, salivary cortisol values, Chinese versions of the Roland-Morris Disability Questionnaire, Oswestry Disability Index, the Edinburgh Postnatal Depression Scale.	Participants in the acupressure group had significantly lower levels of low back pain ( $1.14 \pm 0.91$ ), activity limitations (3.23), physical activity limitations (3.31), and postpartum depression (6.34) compared with the control group. There was no significant difference between the groups in salivary cortisol ( $p > 0.05$ ). No adverse events were reported.[17]
6	Zohreh Hosseini Marznaki, et.al. (2023). The effect of auricular acupressure on short-term postoperative pain intensity after cesarean section: A three-arm randomized controlled trial. Iran	To evaluate the effect of auricular acupressure combined with routine care on short-term pain severity after cesarean section, compared with sham acupressure or routine care alone.	<i>Randomized controlled clinical trial</i> with three parallel groups  Sample: 180 mothers (acupressure = 60, sham acupressure = 61, routine care = 59)	VAS (performed at eight times: before the intervention, and 15, 30, and 60 minutes, and 3, 6, 12, and 24 hours after the intervention)	Up to 6 hours after the intervention, pain intensity in the three groups did not differ significantly. However, at the 6th hour (MD: -1.06), 12th hour (MD: -1.24), and 24th hour (MD: -1.21), pain in auricular acupressure was significantly lower than in the sham group and at the 6th hour (MD: -0.80), 12th hour (MD: -0.98), and 24th hour (MD: -1.00) in the control group.[18]
7	Ayça Şolt Kırcı (2023). Effect of Acupressure Applied After Cesarean Section Under Spinal Anesthesia Postpone the Duration of Taking Analgesics and on The Gastrointestinal System: A Randomized Controlled. Türkiye	To evaluate the effects of acupressure (LI4 and ST36) in women undergoing cesarean section under spinal anesthesia, in relation to delayed analgesic administration and increased spontaneous gastrointestinal motility.	<i>Randomized controlled trial</i>  Sample: 112 primiparous pregnant women who underwent cesarean section with spinal anesthesia (acupressure group=52, control group=60)	Information form and checklist sheet (time between delivery, first analgesic administration, flatus and defecation) Acupressure at points LI4 and ST36 for 20 minutes.	The first analgesic administration was significantly later in the acupressure group (3–5 hours postoperatively) than in the control group (all in the 2nd hour) ( $p < 0.001$ ). The onset of flatus and defecation was faster in the acupressure group (19 hours & 23 hours) than in the control group (34 hours & 27 hours) ( $p < 0.001$ ).[19]
8	Aslihan Aksu, et. al. (2023). Effects of acupressure on pain and first mobilization distance after Caesarean section: A double-blind randomized	To evaluate the effect of acupressure (points SP6, P6, and LI4) applied to women after cesarean section on pain intensity and the first	<i>A prospective double-blinded randomized controlled trial</i>  Sample: 64 post-cesarean section women (32	Descriptive characteristics form, VAS, and the first mobilization distance graph.	VAS scores between time points were only statistically significant in the acupressure group ( $F=99.65$ , $p<0.001$ ). In the placebo group, VAS scores decreased at T1 and increased at T2 and T3 compared to baseline, but this was not statistically significant ( $F=1.78$ ,



	<i>controlled study.</i> Türkiye	mobilization distance.	acupressure, 32 placebo acupressure)		p=0.160) and post-cesarean section mobilization (p<0.001)[20]
9	Taras I. Usichenko, et. al. (2022). <i>Effectiveness of Acupuncture for Pain Control After Cesarean Delivery A Randomized Clinical Trial.</i> Thailand	Evaluating the effectiveness of acupuncture (LI4) as an adjunct therapy pain control after cesarean section compared to placebo and standard care.	<i>Randomized controlled trial</i>  Sample: 180 mothers who had elective cesarean section (60 acupressure, 60 placebo and 60 control)	<i>11 item verbal rating scale</i>	On the first postoperative day, pain intensity was lower in the acupuncture group ( $4.7 \pm 1.8$ ) compared to placebo ( $6.0 \pm 2.0$ ) and control ( $6.3 \pm 1.3$ ). Full mobilization was achieved in 98% of acupuncture patients (vs. 83% placebo, 58% standard), and Foley catheter removal was more frequent in the acupuncture group (93% vs. 72% placebo, 70% standard).[21]
10	Mehtap Akgün, İlkay Boz (2020) <i>The effects of acupressure on post-cesarean pain and analgesic consumption: a randomized single-blinded placebo-controlled study.</i> English	evaluate the effect of acupressure (points P6 and LI4) on post-cesarean pain and analgesic consumption.	RCT, single-blinded, placebo-controlled  Sample: 132 women (44 acupressure, 44 placebo, 44 control)	<i>Visual Analog Scale of Pain(VASP)</i>	The acupressure group ( $3.82 \pm 1.42$ ) experienced the lowest pain levels compared to the placebo ( $5.07 \pm 1.32$ ) and control ( $5.14 \pm 1.17$ ) groups with a p value of 0.000. In addition, there was no statistical difference in pain scores between the placebo and control groups (P=0.464). Acupressure reduced the consumption of paracetamol and pethidine hydrochloride compared to placebo & control (p=0.002; p=0.040).[22]

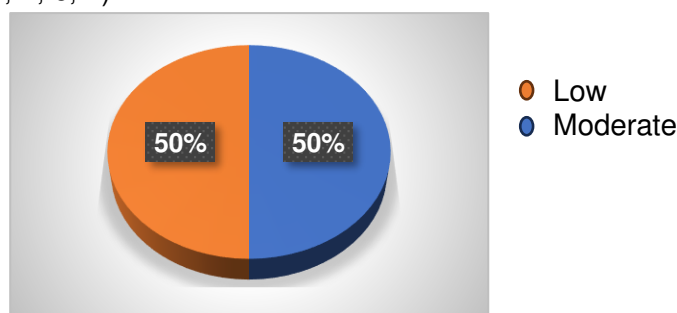
After data mapping, a critical appraisal was conducted to assess the quality and risk of bias of the 10 RCT studies using the Journal of Critical Review (JBI) critical appraisal checklist for RCTs. Articles were divided into several evaluations, with a score assigned to each number on the critical appraisal question: Y for "yes," N for "no," NA for "not applicable," and U for "unclear."

**Table 2. JBI RCT Article Data**

No	Question	Article number according to table 1									
		1	2	3	4	5	6	7	8	9	10
1	Was true randomization used for assignment of participants to treatment groups?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
2	Is allocation to treatment groups hidden?	U	Y	U	U	U	U	Y	Y	Y	Y
3	Were the treatment groups similar at baseline?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4	Were participants unaware of the treatment assignment?	T	Y	T	T	Y	T	T	Y	Y	Y
5	Are those administering the treatment unaware of the treatment assignment?	T	T	T	T	T	T	T	Y	T	T
6	Is the outcome assessor unaware of the treatment assignment?	T	Y	U	U	Y	U	T	Y	Y	Y
7	Were the treatment groups treated identically apart from the intervention of interest?	Y	Y	T	Y	Y	Y	Y	Y	Y	Y
8	Has follow-up been completed and if not, have differences between groups in terms of their follow-up been adequately described and analyzed?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
9	Were participants analyzed in the groups to which they were randomized?	U	Y	Y	Y	Y	Y	U	Y	Y	Y

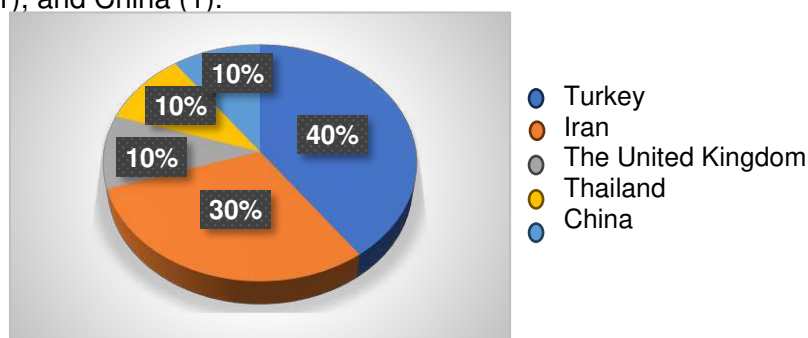
No	Question	Article number according to table 1									
		1	2	3	4	5	6	7	8	9	10
10	Are outcomes measured in the same way for treatment groups?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
11	Are outcomes measured in a reliable manner?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
12	Has appropriate statistical analysis been used?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
13	Was the trial design appropriate, and were any deviations from standard RCT design (individual randomization, parallel groups) taken into account in the conduct and analysis of the trial?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Score		8	12	8	9	11	9	9	13	12	12

From the critical appraisal table data for JBI RCT, 5 articles were obtained with low risk of bias values (table data no. 2, 5, 8, 9, 10) and 5 articles with moderate risk of bias values (table data no. 1, 3, 4, 6, 7).



**Figure 2. Analysis Based on Article Value**

Of the 10 reviewed articles, the majority came from both developed and developing countries. The countries covered in the articles included Turkey (4), Iran (3), the United Kingdom (1), Thailand (1), and China (1).



**Figure 3. Analysis by Country Type**

Mapping data obtained from 10 articles revealed the effect of acupressure on postpartum mothers who delivered vaginally (articles no. 1, 2, 3, 4, 5) and after C-sections (articles no. 6, 7, 8, 9, and 10). Postpartum pain in mothers who delivered vaginally was caused by pain in the perineal area, uterine contractions, early pain after delivery, and low back pain. In post-C-section mothers, pain was caused by the incision wound and pain during postoperative mobilization.

## DISCUSSION

Based on the results of a review involving 10 relevant articles it shows the effectiveness of acupressure in reducing postpartum pain. Postpartum pain reduction is an important aspect of postpartum maternal care. Acupressure is an effective method

for managing postpartum pain. By applying pressure to specific acupressure points, such as LI4, SP6, LV4, BL23, P6, and ST 36, acupressure can relieve the discomfort and pain often experienced by mothers after childbirth, whether vaginal or post-cesarean delivery.

In the context of postpartum pain relief, acupressure leverages the body's natural mechanisms to reduce pain. Acupressure stimulates specific acupressure points on the body, triggering the release of endorphins, natural chemicals in the body that act as natural analgesics. Stimulating specific acupressure points, such as LI4 and SP6, with precise and measured pressure, can stimulate the autonomic nervous system and produce a biochemical response that leads to endorphin release[14]. Endorphins then bind to opioid receptors in the brain, reducing the perception of pain and creating feelings of relaxation and well-being. Endorphins not only act as natural analgesics to reduce pain perception, but they also have a calming effect on the nervous system, reducing the stress and anxiety responses that postpartum mothers may experience[23]. In addition to stimulating the release of endorphins, the gate control theory also states that pressure on acupuncture points can activate thick A $\beta$  fibers, which act as receptors for touch and pressure sensations, thereby inhibiting the transmission of pain signals to the brain's cortex[16][24][25]. Thus, acupressure not only directly reduces pain symptoms but also stimulates bodily responses that help manage pain naturally.

The success of acupressure in reducing postpartum pain has been supported by various scientific studies. For example, acupressure at points LI4, SP6, and LV4, performed immediately and within 2 hours of vaginal delivery, can reduce pain caused by uterine contractions during uterine involution (breastfeeding), perineal pain, and pain experienced in the first hour after delivery[13], [14], [15], [16]. And also in postpartum mothers with low back pain after vaginal delivery, acupressure at points BL23, BL25, BL26, BL40 and SP6 can reduce back pain[26]. Meanwhile, for postpartum mothers who gave birth by C-section, acupressure was performed 1.5 to 2 hours after the C-section at points LI4, P6, SP6 and auricular acupressure was able to reduce pain after the C-section[18], [20], [21], [22]. Although according to Afravi, et al.[16]that the effect of acupressure at the LI4 point to reduce pain was proven only up to 2 hours after delivery, and in the following hour there was no statistically significant difference in the pain scale with the control group. However, according to Kirca and Gul (2020), acupressure at the LI4 and ST36 points and according to Aksu et al. (2024) acupressure at the SP6, P6 and LI4 points had a longer analgesic effect compared to those who were not given acupressure[15], [20]. This means that using more than one acupressure point is more effective than using only one acupressure point. Although both can reduce pain, the analgesic effect lasts longer when using several acupressure points to reduce postpartum pain. This empirical evidence shows that acupressure is not only an alternative approach but also an effective and scientifically proven method in postpartum pain management.

Acupressure, in managing postpartum pain, is becoming increasingly important in the context of holistic and sustainable health care[27]. Acupressure as a non-pharmacological method offers a safe, non-invasive, economical, and natural alternative for postpartum mothers who may wish to delay, avoid, or reduce the use of medications that have the potential to cause side effects[13], [21], [22], [28]. Acupressure, as a non-pharmacological approach proven effective in reducing postpartum pain, offers an accessible and affordable solution for postpartum mothers. In managing postpartum pain, especially in the early postpartum phase or after a cesarean section, the use of acupressure can be a valuable option to help mothers feel more comfortable and support optimal recovery processes, such as accelerating mobilization, accelerating gastrointestinal motility, thus accelerating the production of flatus and defecation after a cesarean section, and improving activity limitations in postpartum mothers with lower back pain after vaginal delivery[19], [20], [21]. Furthermore, the use of non-



pharmacological techniques such as acupressure also aligns with a holistic approach to postpartum care. By considering the physical, emotional, and psychological aspects of postpartum recovery, acupressure can help relieve physical pain while providing a relaxing and mentally calming effect for postpartum mothers.

Integrating acupressure into postpartum care is an important step in improving the quality of postpartum maternal care. By incorporating acupressure into the postpartum care package, healthcare practitioners can provide a more holistic and integrated approach to help mothers recover quickly and comfortably after childbirth. Acupressure can be integrated into postpartum care as part of a comprehensive approach to pain management and improving maternal well-being. Integrating acupressure into postpartum care can also help address specific health issues commonly experienced by postpartum mothers, such as pain due to uterine contractions during uterine involution, perineal pain, low back pain, and pain from the CS incision, as well as accelerate mobilization and increase postpartum physical activity. By providing a variety of treatment options, including non-pharmacological methods such as acupressure, healthcare practitioners can tailor care to the individual preferences and needs of postpartum mothers. As healthcare practitioners, they can help mothers recover better and minimize potential negative postpartum impacts.

Acupressure can also be used as an adjunct treatment in postpartum care. It offers a natural and effective approach to pain management and facilitates patient recovery. In this context, acupressure is not only considered an alternative method but also a valuable addition to a comprehensive postpartum care regimen. One of the main benefits of using acupressure as an adjunct treatment is its ability to enhance the effectiveness of postoperative pain management. By stimulating specific acupressure points, acupressure can naturally relieve pain and facilitate the patient's recovery process, reducing or even eliminating the use of postpartum analgesics, which can potentially cause side effects[13], [22], [29].

Thus, acupressure can be a valuable option in postpartum care, helping mothers navigate the recovery phase more comfortably and safely. The importance of postpartum pain reduction impacts not only the mother's physical well-being but also her overall quality of life. Postpartum pain can impact a mother's ability to properly care for herself and her baby. Therefore, by providing effective non-pharmacological alternatives such as acupressure, we can help mothers better manage postpartum pain, facilitating optimal recovery after delivery.

In this study, although there was no uniformity in the timing of acupressure to reduce postpartum pain, due to variations in the initial timing, duration, and duration of acupressure, the results from the 10 articles demonstrated that acupressure points LI4, SP6, LV4, P6, ST36, BL23, BL25, BL26, and BL40 were proven to reduce pain and accelerate postpartum recovery. This study was distinguished by its strong scientific evidence for the effectiveness of acupressure in relieving postpartum pain. The explanation is comprehensive, encompassing physical, emotional, and psychological aspects, and emphasizing a safe, natural, economical, and easy-to-implement non-pharmacological approach. Furthermore, it encourages the integration of acupressure into clinical practice in a holistic, evidence-based manner. The implications for healthcare practice are significant, such as the need for training healthcare workers in acupressure techniques, developing non-pharmacological treatment protocols, and improving the quality of patient-centered care. Acupressure also has the potential to be an effective, safe, and affordable adjunct therapy in postpartum pain management.

While this study provides valuable insights into the effectiveness of acupressure in reducing postpartum pain, several limitations should be noted. The authors limited the publication date/year and only the full text of published papers was accessible, which impacted the inclusion of papers in this review due to limited access. This, in general,

will influence the results of the review regarding how acupressure reduces postpartum pain.

## CONCLUSION

Current evidence suggests that acupressure can reduce postpartum pain in the short term in some conditions (perineal pain, uterine contraction pain, and CS wound pain), but design heterogeneity and methodological limitations warrant further high-quality RCTs before universal recommendations can be made. Nevertheless, acupressure may be an effective, safe, and cost-effective nonpharmacological approach to postpartum pain relief. These results support the integration of acupressure into postpartum care as a safe and natural alternative for mothers seeking to reduce medication use. Therefore, acupressure can be an integral part of postpartum maternal care, helping to improve the quality of care and the well-being of both mothers and their babies.

Based on these findings, it is recommended that further research be conducted using a multicenter RCT design, a larger sample size, and a standardized acupressure protocol to increase the validity and generalizability of the results. The use of blinding and evaluation of long-term effects should also be considered. In clinical practice, acupressure can be considered as a non-pharmacological complementary therapy for postpartum pain management, provided that healthcare workers receive adequate training. Furthermore, these initial positive results can serve as a basis for integrating acupressure into midwifery education and developing interim clinical guidelines while awaiting stronger evidence.

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