

## Effectiveness of Non-Pharmacological Intervention to Reduce Perineal Pain In Postpartum Women

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### ABSTRACT

The morbidity and mortality rates for pregnant, postpartum and postpartum women are still a big problem. One of the factors of this morbidity rate is postpartum pain caused by perineal tears. Pain management has two methods, namely pharmacological and non-pharmacological. The purpose of this study was to determine the effectiveness of non-pharmacological interventions in reducing perineal wound pain in postpartum mothers. The method used in this paper is a literature review. The preparation of the literature review was carried out by searching articles from the Google Scholar and Pubmed databases. The keywords used included non-pharmacological, perineal pain OR reducing perineal pain, and postpartum. The inclusion criteria in this literature search were articles from 2018-2023, articles in Indonesian, articles in English, free full-text articles, original articles and articles on non-pharmacological therapy to reduce perineal wound pain in postpartum mothers. The results of the study, it was obtained the results of several non-pharmacological interventions that were effective in reducing perineal wound pain, namely Papaya Leaf Decoction, Red Ginger, Cinnamon Extract, Aromatherapy (Chamomile Aromatherapy, Lavender Aromatherapy, Lemon Aromatherapy), Sitz Bath Therapy, Compress Ice Gel and Acuyoga Postpartum. Based on the findings of the literature, this non-pharmacological intervention in postpartum mothers has proven effective to be applied in practice and is recommended for health workers.

**Keywords:** *non-pharmacological, perineal pain, stitch wound pain, postpartum*

### INTRODUCTION

The morbidity and mortality rates for pregnant, postpartum, and postpartum women are still a big problem. This shows that the ability to provide health services still needs to be improved as a whole. One of the factors in this morbidity rate is postpartum pain caused by perineal tears (Yanti, 2010). Pain may occur due to spontaneous tearing or episiotomy of the perineum.

Several factors cause perineal tears, including uncontrolled precipitate parturition, continuous pushing, pushing on the fundus during labor, fragile or edematous perineum and narrow pelvic opening and pubic arch which allows the baby's head to press against the posterior, and extensive episiotomy scars (Oxorn H, 2010).

Worldwide in 2009 there were 2.7 million cases of perineal laceration during childbirth, and about 50% of perineal lacerations occurred in Asia. Almost 90% of the normal delivery process has a tear injury to the perineum (WHO, 2015). Perineal laceration in Asia is also a problem that is quite common in society; 50 % of the incidence of perineal rupture in the world occurs in Asia. In Indonesia, perineal laceration is experienced by 75% of mothers giving birth vaginally. In 2013 found that of a total of 1951 vaginal deliveries, 57% of mothers received perineal sutures 28% due to episiotomy and 29% due to spontaneous tears (Depkes, 2013). The prevalence of women giving birth with perineal rupture in Indonesia in the age group of 25-30 years is 24%, while women aged 31-39 years are 62% (Widya L, 2017).

Pain felt by postpartum mothers hours after giving birth will affect discomfort during physical activity, elimination, and insomnia (difficulty sleeping). In the long term, it can cause depression, dyspareunia (painful sexual intercourse), communication problems, and fatigue (Senol and Aslan, 2017).

The intensity of pain felt by each individual will be different (Judha et al., 2012). The degree of postpartum mother's reaction to perineal wound pain varies greatly, including the reaction felt to pain can be in the form of defense, withdrawal, crying response, and fear. Every postpartum woman has a different perception of pain and how to deal with pain. These perceptions can be influenced by previous experiences, culture, fatigue, and social and family support (Potter, P.A dan Perry, 2010).

Perineal pain can cause complications such as postpartum hemorrhage (Oliviera, et al., 2012). The effects of perineal pain are stress, trauma, fear of injury, loss of appetite, insomnia, and depression, so postpartum mothers experience delays in mobilization, and discomfort when sitting, standing, walking, and moving, which has an impact on the postpartum period, disruption of mother's rest and delays in the initial contact between mothers and babies (Ambarwati and Diah, 2010). Perineal pain will last 10-12 days during the puerperium (Kettle dan Frolich, 2013).

Pain management has two methods, namely pharmacological and nonpharmacological. Pharmacological pain relievers are pain relievers using chemical drugs, including inhalation analgesics, opioid analgesics, and regional anesthesia. The use of pharmacological methods can cause side effects to the body and sometimes do not have the strength of the expected effect. At the same time, nonpharmacological methods are natural pain relief methods without the use of chemical drugs. Non-pharmacologically, it does not have allergic or medicinal effects.

Whilst pharmacological pain relief may be effective, consideration needs to be given to use in women who may be breastfeeding (Heitmann, K., Schjøtt, J., 2020). It is therefore essential that effective and safe pain management options and alternatives to mainstream medical treatments are available to women during the postpartum period. Complementary health approaches are practiced to maintain health and well-being and are used with conventional medicine (National Institute of Health Bethesda, 2015). They include a wide range of practices including biological-based therapies, traditional herbal medicines, and non-biologically-based therapies. Evidence of effectiveness from these

therapies during labor shows a small benefit from acupuncture and acupressure (Smith, C. A., et al, 2020), relaxation, yoga, and music (Smith, C. A., et al, 2020), and massage, warm packs, and thermal massage (Smith, C. A., et al, 2020).

According to (Oliveira et al., 2012) non-pharmacological methods can be carried out through activities without drugs, including hot compress techniques, cold compresses, breathing techniques, hypnosis, reducing pain perception, acupressure techniques, Transcutaneous Electrical Nerve Stimulation (TENS), and therapeutic ultrasounds. Non-pharmacological methods are also cheaper, simpler, more effective, and without adverse side effects.

The pain level rating scale can be divided into five categories, namely no pain, mild pain, moderate pain, severe pain, and very severe pain. There are two methods commonly used to measure pain, namely unidimensional which has one measuring variable for pain intensity, and multidimensional. The unidimensional method is the Verbal Rating Scales (VRS), Numerical Rating Scale (NRS), and Visual Analogue Scale (VAS). This simple method is usually used effectively to provide information about pain (Juniartati & Widyawati, 2018).

The purpose of this study was to determine the effectiveness of non-pharmacological interventions in reducing perineal wound pain in postpartum mothers.

## **METHOD**

The method used in this paper is a review of existing literature to study the effectiveness of non-pharmacological interventions in reducing perineal wound pain in postpartum mothers. The literature sources used in the article search process are using databases from *Google Scholar* and *Pubmed*. The keywords used included *non-pharmacological, perineal pain OR reducing perineal pain, and postpartum*. The inclusion criteria taken in this literature review are articles from 2018-2023, articles in Indonesian and English, free full-text articles, original articles, and articles that discuss *non-pharmacological* therapies to reduce perineal wound pain in postpartum women. As for the exclusion criteria, namely, articles discussing pharmacological therapy to reduce perineal wound pain in postpartum mothers, literature reviews, and articles discussing other therapies. Several steps in conducting a narrative review include searching the scientific article database, identifying keywords (*Google Scholar* 1270 articles and *Pubmed* 4 articles), confirming the content of abstracts and articles by reading and analyzing them in full (45 articles), synthesizing the contents of the articles, and reviewing the results and discussion section (10 articles)

## FINDING AND DISCUSSION

**Table 1. Search Results Literature Review**

| Title, Author & Year  | Research Objectives   | Sample and Location Research  | Types of Research, Interventions, and Research Instruments   | Results   |
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| The Effectiveness of Papaya Leaf Decoction on Reducing Pain in Post-Partum Mothers at Midwife Nurfitriana's Independent Practice (Mayunita, A., 2023)   | To determine the effectiveness of papaya leaf cooking water in reducing pain in postpartum women                    | Postpartum mothers in the TPMB Nurfitriana Work Area from October to December 2022 totaled 32 people                      | Quasi-experimental research with one group design with pretest-posttest. The research design was carried out in two groups, namely the intervention group and the group that was not given intervention, measurements were taken before and after the intervention using a pain scale with a Numeric rating scale (NRS)  | The results showed that the mean pre-test was 5.6 and post-test was 1.8 so that the mean difference was 3.8 (5.6 – 1.8) and the value of P = 0.006008684. so that it can be concluded that there is the effectiveness of papaya leaf cooking water in reducing pain in postpartum mothers |
| Pengaruh pemberian minum jahe merah terhadap penurunan intensitas nyeri luka perineum pada ibu nifas di BPM Permata Bunda Tuban. Jurnal Kebidanan (Mariyatul Qiftiyah, M. Q., & Umu Qonitun, U. Q., 2021) | To determine the effect of drinking red ginger on reducing the intensity of perineal wound pain in postpartum women | Postpartum mothers at BPM Permata Bunda Tuban from February to May 2019 totaled 44 people with systematic random sampling | Analytical experimental research with a pre-experimental design (Static-group comparison design). Researchers gave ginger drink for 5 days by making daily home visits to the treatment group as much as 250 ml (one glass) per drink, while the control group was not given ginger or other non-pharmacological pain measurements by observing pain levels based on the Bourbonis scale | The sample t-test obtained a P of 0.000 less than 0.05, it was concluded that there was an effect of giving red ginger on reducing the intensity of perineal wound pain in postpartum mothers   |
| Pemberian Ekstrak Kayu Manis Terhadap Nyeri Luka Perineum Pada Ibu Postpartum. Jurnal Kebidanan Malahayati  | To determine the effect of giving cinnamon on perineal wound pain in  | Postpartum mothers who experienced perineal injuries in   | Quasi experiment and non-equivalent controlled group approach. A total of 30 respondents consisting of 15  | The average maternal pain before being given cinnamon was 6.433 with a maximum and minimum value of 9.0 and 4.0, the average  |

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| (Romadhon, F. N., Putri, R. D., Evayanti, Y., & Zarma, H., 2021)  | postpartum mothers  | the Working Area of Kelurahan Gedong Air Bandar Lampung were 30 people with purposive sampling   | respondents in the treatment group were given cinnamon and Mefenamic Acid and 15 respondents in the control group were only given Mefenamic Acid. The study was conducted for 7 days in each of the treatment and control groups. Mefenamic acid was only given for 3 days and then a pain scale was measured using the VAS (Visual Analog Scale) on the 1st day of the pretest and the 7th day of the posttest | pain after being given cinnamon was 0.267 with a maximum and minimum value of 1.0 and 0.0. The results of the T test dependent test obtained a p-value of 0.000 <0.05 so that there was an effect of giving cinnamon on perineal wound pain in postpartum mothers  |
| Aroma Terapi Chamomile Menurunkan Skala Nyeri Pada Ibu Yang Mengalami Luka Episiotomi Di Praktik Mandiri Bidan Ponirah Margorejo Metro Selatan Kota Metro (Putri, R. D., Yantina, Y., & Suprihatin, S., 2018) | To determine the effect of giving chamomile aromatherapy to reducing the pain scale of women who experience episiotomy wounds | Postpartum mothers with episiotomies at BPM Ponirah Margorejo Metro Selatan Metro City in June-July 2018 totaled 30 people with purposive sampling | The pre-experimental research method uses the design of One Group Pretest Posttest Design. Provision of aromatherapy using chamomile aromatherapy in the room postpartum care for 10 minutes and pain measurements were taken before and after giving aromatherapy with pain sensation observation sheet instruments obtained from clients by observing and measuring with visual and numerical scales          | The results of the study: the pain scale before the chamomile aromatherapy was carried out with an average value of 5.53 and a standard deviation = 1.20. Measurements on the first day with an average value of 5.07 and a standard deviation = 1.05 and measurements on the second day with an average value of 4.76 and a standard deviation = 0.98. There is an effect of using chamomile aromatherapy on reducing the pain scale of mothers who experience episiotomy wounds with a p-value = 0.000 |
| Pengaruh Pemberian Aroma Terapi Lavender Pada Ibu   | To find out the effect of giving  | Postpartum mothers with 2nd  | Quasi Experiment with pre and post-design with a Control Group.   | The results of the Mann Whitney test obtained a p-value of 0.000 (<0.05)   |

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| Nifas Dengan Nyeri Jahitan Perineum Di Puskesmas Brati. (Himawati, L., & Vitaloka, D., 2021)  | lavender aromatherapy to postpartum women with perineal suture pain  | degree perineal injuries in the delivery room of the Brati Health Center in February were 30 people with purposive side                        | The treatment group was given lavender aromatherapy and still received standard procedures in the form of analgesics, and the control group only received regular procedures, namely analgesics with the instrument used in the form of an observation sheet of the Numerical Rating Scales (NRS) pain scale             | which means that there is an effect of giving lavender aromatherapy to postpartum women with perineal suture pain. The mean value of wound pain in the treatment group after being given lavender aromatherapy was 3.93, while the control group was 5.33. There is a difference of 1.4 in the pain range between the control group and a moderate pain scale of 5.33. compared to the treatment group's 3.93 mild pain scale |
| The Effect of Lemon Aromatherapy on Decreasing Perineum Pain among Postpartum Women at Noah Arofah Medika Clinic Bekasi District in 2020 (Rianti, R., & Rifiana, A. J., 2020) | To determine the effect of lemon aromatherapy on reducing perineal pain among postpartum women                                       | Postpartum mothers who experience perineal pain due to lacerations of the birth canal. As many as 20 people with Accidental Sampling technique | Quasy Experimental Design method with the research design of The Non-equivalent Control Group Design. The experimental group was given treatment while the control group was not, and after giving the treatment a re-measurement was made (post-test) for both groups. The instrument uses Numerical Rating Scale (NRS) | The results of the study using the Independent T-test showed that there was a statistically significant effect of lemon aromatherapy on reducing perineal pain among postpartum women with a p-value of 0.007 (p <0.05)   |
| Pengaruh Latihan Sitz Bath terhadap Intensitas Nyeri Perineum pada Ibu Nifas di RSUD dr. Soekardjo Kota Tasikmalaya (Sariestya, R., (Salwa, S., & Saadah, S., 2022)           | To determine the effect of sitz bath on the intensity of perineal pain in postpartum mothers at RSUD Dr. Soekardjo, Tasikmalaya City | Normal postpartum women at Dr. Soekardjo City of Tasikmalaya in May–June 2018 as many as 31 people used the accidental                         | A quasi-experimental study with one group pre-test and post-test. The implementation of sitz bath therapy was in accordance with the SOP and the researchers ensured the same treatment for each respondent. After urinating and cleaning the female area, the respondent was given therapy                              | the intensity of perineal pain in postpartum women before the sitz bath was severe pain in as many as 26 people (83.87%), and after the sitz bath, that was moderate pain in as many as 28 people (90.32%) There is an effect of sitz bath on perineal pain in postpartum women at RSUD dr. Soekardjo, City   |

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|  |   | sampling technique   | with warm water sitz baths which were carried out 2 times in 1 day with a duration of 10-15 minutes. Pain scale assessment using the NRS scale   | of Tasikmalaya. with value = 0.001.   |
| The Effect Of Sitz Bath Therapy On Intensity Of Perineal Wound Pain In Postpartum Mother At Pmb Dince Safrina Of Pekanbaru In 2019 (Rantika, R., Susanti, A., & ., Y., 2020) | To determine the effect of sitz bath therapy on perineal wound pain in postpartum mothers                       | All 6-hour postpartum mothers who had perineal wound at PMB Dince Safrina with a sample size of 17 taken by purposive sampling technique | Quasy experimental study used one group pre-test and post-test design. Data collection was carried out using the observation method by measuring the intensity of perineal wound pain before and after being given treatment in the form of warm sitz bath therapy. The data collection instrument used an observation sheet and a pain measuring scale, namely the numeric rating scale (NRS) | The results showed that the average intensity of perineal wound pain before and after sitz bath therapy was 5.59 (SD 0.939) and 2.47 (SD 0.943). The results of statistical tests using Wilcoxon on the 95% confidence level found that there was an effect of sitz bath therapy on the intensity of perineal wound pain in postpartum mothers (p-value = 0.000). |
| Aplikasi Pemberian Kompres Ice Gel Terhadap Nyeri Luka Perineum Pada Ibu 24 Jam Postpartum (Meilani, M., Anwar, M., & Hidayat, A., 2022)                                     | To determine the Effect of Ice Gel Compresses on Spontaneous Perineal Wound Pain in 24 hours Postpartum Mothers | All postpartum women with perineal wounds in PMB Sleman Regency were 46 people with a simple random sampling technique                   | <i>True experimental design method.</i> In this study, postpartum mothers in the intervention group were given ice gel compresses and the control group were not given ice gel compresses to measure the intensity of perineal wound pain. The instrument uses a Numerical Rating Scale (NRS) pain scale. Measurements were made during 24-hour postpartum postpartum mothers.                 | The results showed that the intensity of perineal wound pain 24 hours postpartum before the intervention in the treatment group averaged 5.57 and the control group averaged 5.74 while after the intervention the average perineal wound pain intensity in the treatment group became 2.79 and the control group became 3,57.                                    |
| The Effectiveness Of Acuyoga Postpartum On Primiparous   | To examine the effect of AcuYoga  | Normal mothers with 24-  | Quasi-experimental, pre-test, and post-test design with a  | The findings showed that there are significant  |

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| Postpartum Pain With Perineal Trauma (Sipahutar, L. F., Herawati, L., & Widyawati, M. N., 2019) | postpartum on decreasing the pain among primiparous postpartum with perineal trauma. | hour perineal trauma with a total of 34 people using the simple random sample technique | nonequivalent control group. This study was divided into two groups. Group one was given Postpartum Acuyoga intervention; the second group was general postpartum exercise. Instrument using the Visual Analogue Scale (VAS) | differences in pain levels among the experimental group who received the program and the control group who receive routine care (pvalue<0.05). There are significant differences in pain levels among the experimental group before and after program implementation (p<0.05) |
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The results of a literature search found 10 articles that described several non-pharmacological interventions that could be implemented to support midwifery care in reducing perineal wound pain in postpartum mothers.

### **Papaya Leaf Decoction**

Research by Mayunita, A., (2023) shows that one of the non-pharmacological interventions is to use papaya leaf boiled water. Based on the results of this study it can be concluded that there is effectiveness of papaya leaf boiled water in reducing pain in postpartum women at TPMB Nurfitriana. Papaya leaves contain vitamin E which can reduce cramps or pain by inhibiting the production and formation of prostaglandins. In addition, vitamin E also inhibits post-translational activation of cyclooxygenase, thereby inhibiting the metabolism of the phospholipase A enzyme and inhibiting prostaglandin synthesis. Besides that, vitamin E also affects the synthesis of prostacyclin and PGE2 to increase. Thus affecting the activity of prostacyclin and PGE2 as a vasodilator and the relaxation of uterine smooth muscle (Marlina, 2012). Papaya leaves contain flavonoids that act as analgesics whose mechanism of action is to inhibit the action of the cyclooxygenase enzyme. Thus it will reduce the production of prostaglandins by arachidonic acid thereby reducing pain (Gunawan, 2008).

### **Red Ginger**

Penelitian Mariyatul Qiftiyah, M. Q., & Umu Qonitun, U. Q., ( 2021) dengan intervensi berupa pemberian minum jahe selama 5 hari sebanyak 250 ml (satu gelas) kepada ibu postpartum terbukti dapat menurunkan intensitas nyeri luka perineum pada ibu nifas. Ginger contains essential oils such as gingerols, shoagals, and zingerone which are quite high and function to reduce pain (Ozgoli et al., 2009). The chemical content of gingerol in red ginger can block prostaglandins so that it can reduce pain including perineal wound pain (Ramadhan, 2013). The volatile component of ginger which consists of zingiberene, ar-curcumin, and sesquiphelandrene contains a-pinene, bornyl acetate, borneol, and others,

function as relaxing agents that inhibit the autonomic nervous system to accept the synthesis of prostaglandin stimuli which can reduce perineal wound pain. Ginger rhizome is anti-inflammatory or anti-inflammatory (Maryani, 2008). This is also in line with research conducted by Putri, N. C. J. (2021) and Simarmata, M., & Simanjuntak, L. (2020) that red ginger aromatherapy and drinking red ginger boiled water can accelerate wound healing and reduce the intensity of perineal wound pain.

#### ***Cinnamon Extract***

Cinnamon contains Cinnamaldehyde and Eugenol. Cinnamaldehyde is found in 65-80% of the bark, while eugenol in the bark is 5-10%. Eugenol is a chemical compound that is often used to treat pain and can inhibit the synthesis of prostaglandins and function as an anti-inflammatory and antinociceptive. Romadhon, F. N., et al (2021) researched Administering Cinnamon Extract to Perineal Wound Pain in Postpartum Mothers with the results of the T-test dependent test obtained a p-value of  $0.000 < 0.05$  so it can be concluded that there is an effect of cinnamon on perineal wound pain in postpartum mother.

#### ***Aromatherapy***

Non-pharmacological actions that exist today include relaxation techniques. One of the relaxation techniques is by giving aromatherapy. The aromatherapy mechanism in the human body takes place through two physiological systems, namely the body's circulation and the olfactory system, fragrances can affect a person's prikis condition, memory, and emotions.

#### ***Chamomile Aromatherapy***

Chamomile has been used since ancient times for medicine and health care. Chamomile contains tryptophan which can help fun and reduce anxiety (Sinclair, 2010:713). The mechanism of chamomile therapy in reducing pain is related to the mechanism of anti-inflammatory effects and the presence of aromatherapy where the nerve fibers in the nose carry sensory input to the brain which is the center of instinct, memory, and various vital functions. Chamomile is most often used to treat sleep disorders, digestive problems, pain relievers, and many more. Research by Putri, R. D., Yantina, Y., & Suprihatin, S., (2018) proved that giving aromatherapy for two days had an effect on the pain scale which was reflected in the decrease in the average pain scale since being given chamomile aromatherapy from the first day to the second day. In line with the study of Aradmehr, et al, (2017) with results showing that there was an effect on reducing the pain scale in women with episiotomy wounds after being given therapy on the first day to the seventh day

#### ***Lavender Aromatherapy***

Research by Himawati, L., & Vitaloka, D., (2021) regarding the Effect of Giving Lavender Aromatherapy to Postpartum Mothers with Perineal Suture Pain, it was concluded that there was an effect of giving lavender aroma on postpartum women with perineal pain. The lavender intervention has a greater effect in reducing perineal wound pain. The main chemical component of lavender is linalyl acetate, linalool. Linalyl acetate is used as an anesthetic for animals and can inhibit chemical pathways. Linalool can also be used as an antispasmodic (Liu, Lin, Jiang, et al, 2008). The active substances in lavender aromatherapy have properties as bactericidal, analgesic, antidepressant, and antispasmodic when inhaled

aromatherapy, linalool and linalyl will stimulate the hypothalamus to release endorphins because they can cause a feeling of relaxation and also have an effect as an analgesic (Liu et al, 2008).

### **Lemon Aromatherapy**

Lemon aromatherapy is a type of aromatherapy that can be used to treat pain and disease. One of the substances contained in lemon is linalool, which is useful for stabilizing the nervous system so that it can have a calming effect on anyone who inhales it. In addition, the content of Limonene which is the main component in citrus chemical compounds can inhibit the work of prostaglandins so that it can reduce pain and Linalil acetate contained in lemon aromatherapy is useful for normalizing emotional states and has properties as a sedative and has an analgesic effect (Wong, 2010; Young, 2011). Research to Rianti, R., & Rifiana, A. J., (2020) the average post-test pain scale in the experimental group is 4.30 and in the control group was 5.90. The maximum value in the pre-test experimental group and the control group is also the same which is 8. While the maximum value in the post-test experimental group is 6 and in the control group is 7. The minimum value of the pretest experimental group and control group is 5 and 4. While The Minimum post-test scores in the experimental group and the control group are 2 and 4. This suggests that the experimental group after being given lemon aromatherapy has a smaller pain scale value than the experimental group. This is in line with the research of Handayani, Y. U., & Ulandari, N. (2018) that there is an effect of lemon aromatherapy on reducing perineal pain.

### **Sitz Bath Therapy**

Warm Sitz Bath therapy includes soaking the perineum in warm water to reduce discomfort and improve the wound healing process by cleaning the perineum and anus which will help increase blood circulation and reduce inflammation (Lockhart, et al, 2014). Sitz baths with warm water can reduce pain and prevent infection and accelerate the healing of perineal wounds experienced by postpartum mothers (Rosdahl and Kowalski, 2014). Research by Rantika, R., Susanti, A., & ., Y., (2020) found that there was an effect of sitz bath therapy on the intensity of perineal wound pain in postpartum mothers as well as research conducted by Salwa, S., & Saadah, S., (2022) The results of this study showed that the intensity of perineal pain in postpartum women before taking a sitz bath was severe pain in 26 of 31 people and after a sitz bath, namely moderate pain in 28 of 31 people ( $p = 0.001$ ). In conclusion, there is an effect of sitz bath on perineal pain in postpartum mothers.

### **Compress Ice Gel**

Cold compresses or cold therapy is a physical therapy modality that uses the physical properties of cold to treat various conditions, including perineal wound pain. The purpose of cold compresses for postpartum women with perineal wound pain is to reduce pain, and inflammation, prevent edema, reduce body temperature, and control bleeding by increasing vasoconstriction. Based on the research by Meilani, M., Anwar, M., & Hidayat, A., (2022) the results showed that there was an effect of giving ice gel compresses to perineal wound pain in mothers 24 hours postpartum. The decrease in the intensity of

perineal wound pain in the group of mothers who were given ice gel compresses was greater than in those who were not given ice gel compresses.

### **Acuyoga Postpartum**

Yoga is a practical effort to harmonize body, mind, and spirit, which is truly the best for building strong posture, flexible and strong muscles, and the central nervous system (Hughes CM, 2018). Postpartum Acuyoga (Combination of Acupressure & Yoga) is a combination of acupressure and yoga techniques, where both of these techniques will be combined as a unified relaxation technique so that it can regulate vital energy flow. Some of the benefits of acuyoga are increasing the body's resistance, muscles becoming supple, strengthening bones, and preventing and treating pain. On the body's acuyoga as a whole in physical, emotional, and spiritual not only focuses on the disease. Based on the research of Sipahutar, L.F., Herawati, L., & Widyawati, M.N., (2019) it can mean that combination between two methods of acupressure and yoga has a strong positive effect on reducing postpartum pain with perineal trauma. This also has a positive impact on feelings of pleasure and happiness that data stimulates immunity or immunity.

### **CONCLUSION**

Based on the findings of the 10 selected articles, it can be concluded that this non-pharmacological intervention is considered effective for reducing perineal wound pain in postpartum mothers. Non-pharmacological interventions that are effective based on this review of the literature include *Papaya Leaf Decoction, Red Ginger, Cinnamon Extract, Aromatherapy (Chamomile Aromatherapy, Lavender Aromatherapy, Lemon Aromatherapy), Sitz Bath Therapy, Compress Ice Gel, and Acuyoga Postpartum.*

It is recommended for health workers, especially midwives, to review each suitable intervention before it is applied to the mother to reduce perineal wound pain and the need to integrate basic health care for postpartum mothers in clinical practice.

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