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Research Article

Effectiveness of Warm Compress with Lemon Therapy on Pain Intensity in Post Partum Mothers

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Abstract

Aims: Knowing the effectiveness of warm compresses with lemon aromatherapy on reducing the intensity of perineal wound pain in post partum mothers.

Methods: Quasi experimental with one group pretest-posttest research type. The sample in this study were all postpartum mothers in March 2022 as many as 30 people, the sampling technique was accidental sampling.

Results: Prior to the intervention, the majority of respondents reported moderate pain (53.3%), whereas following, the majority of them experienced light pain (60%). Warm compresses with lemon aromatherapy are beneficial in lowering the intensity of perineal wound pain in postpartum moms (p.value 0.000).

Conclusion: Warm compresses with lemon aromatherapy have been shown to reduce the intensity of perineal wound pain in postpartum women. It is envisaged that by offering knowledge about pain management using warm compresses, midwives will be able to improve services in managing perineal wound pain.

Keywords:

Warm compress, Lemon aromatherapy, Perineal wound

INTRODUCTION

Normal postpartum mothers frequently experience discomfort in the perineal region as one of their issues. Perineal discomfort is experienced by the mother at the time of delivery due to perineal rupture. Almost all women with normal delivery experience a perineal tear, either by accidental episiotomy or by spontaneous tearing during delivery. From these tears, some need to be stitched and some don't. From these stitches, it can also cause pain (1).

WHO data shows that 2.7 million cases of perineal rupture occur in childbirth and will continue to increase to 6.3 million in 2050. In Asia the incidence of perineal rupture reaches 50% of cases, while in Indonesia 85% of mothers giving birth normally experience perineal rupture. The impact of perineal rupture is pain felt by the mother in the perineal area (2).

Perineal tears can lead to dysfunction of the female reproductive systems, excessive bleeding, and infection that can ultimately lead to death or sepsis, so it's important to treat mothers who suffer these injuries. As well as having an effect in the form of discomfort, anxiety, and fear of movement, the mother's pain will have an effect (3).

A tear in the perineum, vagina, cervix, or uterus can cause perineal pain, and these tears can happen naturally or as a result of delivery manipulation. Patients who have had a perineal rupture and required suturing often report experiencing pain in the perineum. (4)

Many new moms report feeling quite uncomfortable after giving birth (51%), and 40% report being afraid to move about too soon because of perineal pain, which can lead to complications like uterine sub involution (10%), a rough lochea (13%),

postpartum hemorrhage (6%), and infection (5%). Because of the discomfort, the mother may feel less motivated to breastfeed (9%) than she otherwise would. Women's physical, mental, and social health are all negatively impacted by periureal pain (5).

Pain management can be done in two ways, namely pharmacological and non-pharmacological. Pharmacological methods that are often used to reduce pain are analgesics or by using drugs. The non-pharmacological method that can be used is to use a simple method of warm compresses and lemon aromatherapy. This method can relieve pain by slowing nerve conduction velocity and inhibiting nerve impulses, and increasing the pain threshold and can induce local anesthesia. Warm compresses work by slowing the speed of nerve conduction, so that fewer pain impulses reach the brain (1)

Aromatherapy is a form of complementary medicine that makes use of nontoxic liquid substances. Aromatherapy is the practice of using aromatic plant chemicals, such as essential oils, to affect a person's state of mind and health in positive ways. You can use aromatherapy with essential oils from plants including lavender, lemon, jasmine, orange, peppermint, and rosemary (6).

Research by (7) on the effect of lemon aromatherapy on post-SC pain reduction with the results of post-sectio caesarea pain intensity research prior to administration provides support for the use of this technique for pain management in the treatment of perineal pain. Pain intensity after a cesarean section was reduced from a minimum of 2 on the pain scale to a maximum of 5 after receiving lemon aromatherapy, suggesting that this treatment is effective.

66-80% limonene, geranyl acetate, nerol, linalyl acetate, 0.4-15% -pinene, 1%-4% -pinene, 6%-14% terpinene, and myrcen are all found in lemon essential oil. Citrus chemical components, especially limonene, have been shown to reduce pain by inhibiting the production of prostaglandins. The ester compound linalyl acetate, used in

lemon aromatherapy, is produced when organic acids combine with alcohols. As a sedative and tonic, especially for the nervous system, esters can help restore equilibrium to the mind and body (8).

When you inhale lemon essential oil, the scent travels to the olfactory cortex in the back of your brain. The fragrance is evaluated by a variety of neuron cells and sent on to the limbic system, which in turn relays the information to the hypothalamus. Aromatherapy using lemon essential oil has been shown to treat pain by stimulating the thalamus, which then releases pain-relieving neurotransmitters such as enkephalin, serotonin, and endorphins. The neuromodulators known as enkephalins have been shown to reduce the sensation of pain in the body.

From the data obtained at the GSIA Clinic, the number of mothers giving birth from October to December 2021 was 125 people and 92 people who experienced perineal tears. Based on interviews conducted from respondents who experienced a perineal tear complaining of pain in the perineum and fear of elimination, and to relieve the pain the mother received drug therapy from the midwife. As a result, researchers hope to perform a study in 2022 on "the effectiveness of warm compresses with lemon aromatherapy on reducing the intensity of perineal wound pain in postpartum mothers" at the GSIA Nabire clinic in Papua.

METHODS

The study employs a quasi-experimental research design using a one-group pre-test-post-test design. Data is collected using primary data, which is data gained via observations. An observation sheet was employed as the data gathering equipment. In this study, all postpartum moms at the GSIA Nabire Clinic in Papua in March 2022 (accidental sample) were included. The analytical methods employed are univariate and bivariate analysis with paired simple t tests.

RESULTS

Table 1. Frequency Distribution of Perineal Wound Pain Intensity in Post Partum Mothers Prior to Warm Compresses with Lemon Aromatherapy at the GSIA Nabire Clinic, Papua 2022

No	Pain Intensity	Frequency	%
1.	No Pain	0	0,0
2.	Mild Pain	9	30,0
3.	Moderate Pain	16	53,3
4.	Severe Pain	5	16,7
Amount		30	100.0

Table 1 shows that out of the 30 responders, 53.3% were experiencing moderate pain before to receiving warm compresses scented with lemon, 30.0% were experiencing mild pain, and 5.0% were experiencing severe pain before receiving the aromatherapy treatment. (16.7%).

Table 2. Frequency Distribution of Perineal Wound Pain Intensity in Post Partum Mothers After Warm Compresses with Lemon Aromatherapy At GSIA Nabire Clinic Papua in 2022

No	Pain Intensity	Frequency	%
1.	No Pain	4	13,3
2.	Mild Pain	18	60,0
3.	Moderate Pain	8	26,7
4.	Severe Pain	0	0,0
Amount		30	100.0

Table 2 shows that after performing warm compresses with lemon aromatherapy, most of the 30 respondents experienced mild pain, including 18 (60.0%), moderate pain, including 8 (26.7%), no pain, including 4 (13.3%), and severe pain was not found again (0%).

Table 3. Average Perineal Wound Pain Intensity Before and After Warm Compresses with Lemon Aromatherapy at GSIA Nabire Clinic Papua in 2022

Perineal Wound Pain					
Warm Compress with Lemon Therapy Aroma	N	Mean	Difference Mean	Min	Max
<i>Pretest</i>	30	4,93	2,26	1	9
<i>Posttest</i>	30	2,67		0	6

According to table 3, the average perineal wound pain intensity before being given a warm compress with lemon aromatherapy was 4.93, and the average perineal wound pain intensity after being given a warm compress with lemon aromatherapy was 2.67, resulting in a 2.26 difference in the average value of the intensity of perineal wound pain before and after being given a warm compress with lemon aromatherapy.

Table 4. Effectiveness of Warm Compress with Lemon Aromatherapy on Reducing Intensity of Perineal Wound Pain in Post Partum Mothers at Gsia Nabire Clinic, Papua In 2022

Group	Pain Intensity	Frequency		Mean		Differenc Differenc		P value
		Pre test	Post test	Pre test	Pos test	e Mean	e SD	
Warm compress with lemon therapy aroma	No Pain	0	4	4,93	2,6	2,26	0,248	0,000
	Mild Pain	9	18		7			
	Moderate Pain	16	8					
	Severe Pain	5	0					

According to table 4, the average change in perineal wound discomfort before and after a warm compress with lemon aromatherapy is 2.26, with a standard deviation of 0.248. There is a significant difference between the intensity of perineal wound pain before and after receiving a warm compress with lemon aromatherapy, as indicated by the p value (0.000) (0.05). Warm compresses with lemon aromatherapy reduce the intensity of perineal wound pain in postpartum mothers at the Gsia Nabire Clinic in Papua New Guinea in 2022, according to the findings.

DISCUSSION

Intensity of Perineal Wound Pain Before being given a Warm Compress with Lemon Aromatherapy

The data shows that before the warm compress with lemon aromatherapy was applied, 16 (or 53.3%) of the 30 respondents reported moderate pain, 9 (or 30%) suffered mild pain, and 5 (or 7.5%) experienced severe pain. (16.7%).

Pain is a condition characterized by an unpleasant sensation. It is very subjective because each person's perception of pain differs on a scale or level, and only that person can explain or evaluate the agony he feels. Perineal pain caused by a tear in the perineum, vagina, cervix, or uterus can occur spontaneously or as a result of manipulative maneuvers during labor and delivery. Perineal pain as a sign of suturing wounds experienced by the patient after expulsion (4).

The findings of this study are consistent with the findings of Haifa Wahyu (9) research, which found that prior to the intervention, 100% of the respondents reported moderate pain.

The scale of pain felt by each individual is different, there are many factors that can influence, namely environmental factors, age, general condition, endorphins, situational factors, gender, past experience, parity, emotional status, personality, culture, social, meaning of pain, cognitive function, individual beliefs. According to the researcher's ideas, a person's previous experience with pain impacts the degree of the pain he feels now. When someone has felt the same pain before, the severity of that person's agony is usually less than the intensity of the pain felt the first time. Age and parity are factors that contribute to post-partum perineal wound pain. 16 (or 53.3%) of the 30 responders reported moderate discomfort, 9 (or 30%) had mild pain, and 5 (or 7.5%) experienced severe pain before the warm compress with lemon aromatherapy was applied. (16.7%).

Perineal wound pain intensity after being given a warm compress with lemon aromatherapy

The results showed that after using warm compresses with lemon aromatherapy, the majority of the 30 respondents (60%) reported mild pain, 8 (26.7%) reported moderate pain, 4 (13.3%) reported no pain, and 0% reported severe pain.

Warm water compresses are recommended to reduce pain because they can relieve pain,

increase muscle relaxation, increase circulation, enhance psychological relaxation, provide a sense of comfort, and function as a counterirritant. At the physiological stage, warm compresses reduce pain through transmission where the warm sensation of giving compresses can inhibit the release of inflammatory mediators such as pro-inflammatory cytokines, chemokines, which can reduce nociceptor sensitivity which will increase the sense of threshold for pain (10)

There are pharmacological and non-pharmacological methods of treating perineal pain. The use of pharmacological methods is pain relief by using chemical drugs, among others by giving analgesics and anesthetics, but the use of pharmacological methods can cause side effects for the body such as drowsiness, nausea and long-term use can damage kidney, liver, and kidney function. and can cause heart disease. Non-pharmacologically is a method of natural pain relief without using chemical drugs such as lemon aromatherapy (11).

The results of this study are consistent with those of Haifa Wahyu's (2019) study, which found that 80% of respondents encountered mild pain following the warm water compress intervention.

Researchers speculated that relieving new moms' perineal pain with warm compresses and lemon aromatherapy would be effective. This is because of the lemon aromatherapy's chemical composition, which helps alleviate the mother's labor pains. In addition to the aforementioned variables, the degree to which a respondent's focus on his attention when given lemon aromatherapy determines the extent to which the pain scale decreases after receiving the treatment can vary. Warm compresses with lemon aromatherapy have been shown to reduce the severity of perineal wound pain, as shown in this study.

Effectiveness of Warm Compress with Lemon Aromatherapy on Reducing

Intensity of Perineal Wound Pain in Post Partum Mothers

The mean difference in perineal wound pain between before and after a tepid compress with lemon aromatherapy was 2.26, with a standard deviation of 0.248. The p value of (0.000) (0.05) from a comparison of perineal wound pain levels before and after receiving a warm compress with lemon aromatherapy indicates a statistically significant difference between the pain levels before and after treatment. The above data show that in 2022, at the Gsia Nabire Clinic in Papua, warm compresses with lemon aromatherapy are efficient in lowering the intensity of perineal wound pain in postpartum moms.

Warm is the act of giving a warm feeling to the client by using a liquid or device that causes a feeling of warmth in certain body parts that need it. Warm compress therapy is an action by giving a warm compress which aims to meet the need for comfort, reduce or relieve pain, reduce or prevent spasm muscles, and provide a sense of warmth (12).

Postpartum ladies suffering from perineal pain can benefit from aromatherapy with lemon essential oil. Aromatherapy The chemical components found in citrus fruits, of which lemon is the most prominent example, block the production of pain-causing prostaglandins. The ester molecule linayl acetate is produced when organic acids and alcohols react (13). The neurological system is particularly responsive to esters' calming and stimulating effects (Turlina & Hikmah, 2021). They can also help provide equilibrium to one's feelings and physical health.

According to (8), the dependent T test results were p 0.000 0.05. The results of this study are consistent with those findings. At DPM "H" Bukittinggi 2018, it is anticipated that midwives will use lemon aromatherapy as a non-pharmacological method for reducing perineal pain. The conclusion of this study is that lemon aromatherapy has an

effect on reducing perineal pain in postpartum mothers 1-2 days after delivery.

According to the researcher's assumptions, these findings show a reduction in the degree of perineal wound discomfort before and after receiving warm compress therapy. Because the warm compress functioned by preventing the transmission of painful sensations, fewer pain impulses reached the brain, the pain scale and average value of the pain intensity of the perineal incision decreased before and after the warm compress. Warm compresses have a physiological effect on the body, softening fibrous tissue, increasing tissue oxygenation, preventing muscle stiffness, vasodilation, and facilitating blood flow, reducing or eliminating pain. Meanwhile, lemon aromatherapy, in addition to lowering pain, can relax so that the mother becomes calm and relaxed as the pain scale in the perineal incision decreases. The majority of postpartum moms had moderate pain from their perineal wounds, the study found. Any damage to the perineum, whether it be from natural tearing or through a surgical procedure like an episiotomy, can induce pain, and each postpartum woman will have her own unique level of suffering. The majority of postpartum women report feeling substantial pain prior to therapy, but report feeling much better after participating in warm compress therapy and lemon aromatherapy. From what has been said, the researcher can infer that warm compress therapy and lemon aromatherapy are more effective in this situation at alleviating perineal wound discomfort.

CONCLUSION

Most participants reported significant perineal wound discomfort prior to getting warm compresses and lemon aromatherapy (53.3%), while most reported minimal pain (80%) after receiving these treatments. Postpartum women who use warm compresses scented with lemon report much less pain from their perineal wounds (p 0.0001).

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