THE EFFECT OF WARM COMPRESSES IN REDUCING PERINEAL WOUND PAIN IN POSTPARTUM MOTHERS

Linda Suryani[1], Siti Zakiah Zulfa[2]
[1]Faculty of Health Sciences, Institute of Health Sciences Payung Negeri Pekanbaru
Email: linda.suryani@payungnegeri.ac.id
[2]Faculty of Health Sciences, Institute of Health Sciences Payung Negeri Pekanbaru
Email: zakiahzlf@gmail.com

ABSTRACT

Nearly 90% of normal births experience lacerations to the perineum. Perineal wound care in postpartum mothers is useful for reducing discomfort, maintaining cleanliness, preventing infection and accelerating wound healing. One non-pharmacological method to relieve perineal pain is to use a warm compress. Warm compresses are given with the aim of providing comfort, treating pain, reducing or preventing muscle spasms and providing a feeling of warmth in certain areas. Apart from that, the advantages of warm compresses can help wound recovery, reduce infection and inflammation, improve blood flow and provide calm and comfort to clients. The research aims to determine the effect of warm compresses in reducing perineal wound pain in postpartum mothers at PMB Dince Safrina. This study used a quasi-experiment research design with a one group pretest post and posttest design, namely comparing the intensity of perineal wound pain before and after giving a warm compress. The research sample was 30 post partum mothers who experienced perineal wounds at PMB Dince Safrina. The sampling technique is non-probability sampling (accidential sampling). The pain scale observation research instrument was the Numerical Rating Scale (NRS). Data processing used the Wilcoxon Signed Ranks Test to determine the effect of warm compresses in reducing perineal wound pain in postpartum mothers. The research results obtained Asymp value. Sig. (2-tailed) is < α=0.05, which means Ha is accepted. It can be concluded that there is an effect of warm compresses on reducing perineal wound pain in postpartum mothers at PMB Dince Safrina. It is hoped that this research can be used as consideration in overcoming the problem of perineal wound pain in postpartum mothers by health workers and can be used as an illustration for future researchers and it is hoped that it can be used as a reference for further research on non-pharmacological pain management.

Keywords: Warm Compresses, Level of Pain, Perineum Wounds, Postpartum

INTRODUCTION

The postpartum period (puerperium) is the period after giving birth to a baby, namely the recovery period, starting from the end of labor until the uterus returns after pre-pregnancy. Approximately 50% of maternal deaths occur in the first 24 hours post partum so quality postpartum services must be provided during that time to meet the needs of mother and baby (Rini S & Kumala F, 2017).

According to WHO, almost 90% of normal births experience lacerations to the perineum. Perineal lacerations in Asia are also a problem that occurs quite often in society, 50% of perineal rupture incidents in the world occur in Asia. The prevalence of birthing mothers who experience perineal wounds in Indonesia in the 20-30 year age group is 63%, while in birthing

mothers aged 31-39 years it is 37% (Choirunissa et al., 2019). Postpartum care is needed in this period because it is a critical period for both mother and baby. Caring for perineal wounds in mothers after giving birth is useful for reducing discomfort, maintaining cleanliness, preventing infection and speeding up wound healing (Yuliana D, 2022).

There are 2 postpartum care methods that can be used to reduce perineal pain, namely pharmacological and non-pharmacological methods. Pain management using pharmacological methods is still controversial, this is because it uses drugs with chemical substances that will have a negative effect on the mother and baby. For example, the use of anti-pain analgesics such as mefenamic acid which causes side effects of stomach pain and is dangerous for babies if it enters the body and accumulates in breast milk, which may cause allergic reactions and diarrhea in babies. Therefore, the non method pharmacology is considered safer to apply because there are almost no side effects and it depends on the physiological role of the body (Mauluddina & Veradilla, 2023). Several types of non-pharmacological therapy to relieve perineal pain that have been used include biofeedback, self-hypnosis, cutaneous stimulation, distraction, massage, giving warm and cold compresses. Giving warm compresses can be done independently at home, but it should be noted that several types of warm compresses must be monitored and must be carried out by medical personnel (Azzah et al., 2022).

A warm compress is the act of giving a warm feeling to the client by using a liquid or tool that creates a feeling of warmth in certain parts of the body that need it, while a cold compress is placing a substance at a low temperature with the aim of carrying out healing therapy. Apart from reducing pain, warm compresses can also be used to calm postpartum mothers regarding the anxiety and fear they are experiencing (Choirunissa et al., 2019).

Warm compresses can provide a warm feeling which aims to provide a feeling of comfort, overcome pain, reduce or prevent muscle spasms and provide a feeling of warmth in certain areas. Warm compresses have a physiological impact on the body, namely softening fibrous tissue, affecting tissue oxygenation so that it can prevent muscle stiffness, vasodilate and improve blood flow, so that it can reduce or eliminate pain. Apart from that, the advantages of warm compresses can help wound recovery, reduce infection and inflammation, improve blood flow and provide calm and comfort to clients (Susilawati & Ilda, 2019).

Results of the literature study carried out (Setiayani et al., 2023) regarding the Effectiveness of Warm Compresses in Reducing the Intensity of Perineal Pain in Childbirth, it was found that the intensity of labor pain in the 1st stage can decrease when a warm compress intervention is given to the perineum, because it can reduce muscle spasm and increase blood flow, thereby providing a warm and calming effect. Warm compress therapy is effective in reducing pain in the first stage of labor.

The results of the same research were also carried out (Isnaini et al., 2022) regarding Warm Compresses and Cold Compresses to Reduce the Pain of Perineal Lacerations in Postpartum Mothers where the results obtained from the t test measuring warm compresses and cold compresses at stage 3, the p-value of 0.000 was obtained <0.05 which means there is a

difference in the effectiveness of warm compresses and cold compresses cold in reducing perineal pain.

PMB Dince Safrina is one of the PMBs in Pekanbaru City that has implemented non-pharmacological methods to treat perineal wound pain in postpartum mothers. One of the methods used at PMB Dince Safrina to reduce perineal wound pain is by using the warm compress method. Based on an initial survey in September 2023, at PMB Dince Safrina data was obtained for 85 deliveries for the period January – August 2023. A total of 45 people out of 85 normal deliveries experienced perineal injuries either spontaneously or through episiotomy. Of the number of post-partum mothers who experience perineal wounds, on average they experience pain and are afraid of early mobilization, to overcome this, warm compress therapy is given. Based on the above background, researchers are interested in conducting research on the Effect of Warm Compresses in Reducing Perineal Wound Pain in Postpartum Mothers at PMB Dince Safrina.

RESEARCH METHODS

This type of research is a quasi-experimental study with a one group pretest post and posttest design, namely comparing the intensity of perineal wound pain before and after giving a warm compress. This research was conducted in September–November 2023. The research population was postpartum mothers who experienced perineal wounds at PMB Dince Safrina with a sample of 30 people. The sample selection technique uses non-probability sampling (accidential sampling). The measuring instrument used is the Numerical Rating Scale (NRS). Data analysis was carried out univariate and bivariate. Univariate analysis obtained from the results of data collection is presented in the form of a frequency and percentage distribution table. Bivariate analysis was used to determine the effect of warm compresses in reducing perineal wound pain in postpartum mothers at PMB Dince Safrina. In analyzing the data bivariately, data presentation was carried out using the Wilcoxon Signed Ranks Test statistical test.

RESEARCH RESULT

The research was conducted in September–November 2023 at PMB Dince Safrina. Samples were taken using non-probability sampling (accidential sampling). So, a sample of 30 post partum mothers who experienced perineal wounds were obtained. Below are presented the overall research results:

Table 1: Respondent Characteristics

Variabel	n	%
Age		
< 20 years	8	27
20-35 years	19	63
> 35 years	3	10
Level of education		
Low education	10	33
Secondary education	11	37
Higher education	9	30

Table 1 shows the characteristics of the most respondents in the 20-35 year age group, 19 people (63%) and 11 people (37%) who had a secondary education level.

Table 2: Distribution of Pretest and Posttest Results of Perineal Wound Pain Levels for Postpartum Mothers Before and After Warm Compresses at PMB Dince Safrina

Pain Level	n	%
Pretest		
Mild Pain	0	0
Moderate Pain	8	27
Severe Pain	22	73
Posttest		
Mild Pain	11	37
Moderate Pain	18	60
Severe Pain	1	3

Table 2 shows that the pain level of respondents before the procedure was carried out was mostly at the severe pain level, 22 people (73%), followed by the moderate pain level, 8 people (27%). Regarding the level of pain of respondents after the procedure, the highest level of pain was moderate, 18 people (60%), followed by mild pain level, 11 people (37%) and 1 person (3%) with severe pain level.

Table 3: Normality Test Results for Postpartum Mother's Perineal Wound Pain Level

Pain Level	Spahiro=Wilk		
	Statistic	df	Sig
Pretest	0,729	30	0,001
Posttest	0,588	30	< 0,001

Table 3 shows that the significant value at the beginning of the research assessment (pretest) was obtained by a p value of less than 0.05, namely 0.001, as well as at the end of the research assessment (posttest), a significant value was obtained less than 0.05, namely <0.001. This means that at the beginning and end of the research assessment there was an abnormal distribution of data. This shows that the analysis used is non-parametric analysis because the data distribution is not normally distributed.

Table 4: Comparison of Postpartum Mother's Perineal Wound Pain Levels Pretest and Posttest

Pain Level	(mean±SD)	Δ	Sig
Pretest	6,25±1,482	1,42	<0,001
Posttest	4,72±1,013		

Table 4 shows that there is a change between the pre-test and post-test, namely the difference in the average pain level value is 1.42. This means that there was a decrease in the level of pain after the respondent received a warm compress on the perineum wound. From the results of the

analysis using the Wilcoxon Signed Ranks Test, it can also be seen that the Asymp. Sig. (2-tailed) is < α=0.05, which means Ha is accepted. It can be concluded that there is an effect of warm compresses on reducing perineal wound pain in postpartum mothers at PMB Dince Safrina.

DISCUSSION

From the research results, it can be seen that of the 30 postpartum mothers at PMB Dince Safrina, the highest level of pain before the procedure was carried out was severe pain, 22 people (73%), followed by 8 people (27%) with moderate pain levels. Regarding the level of pain of respondents after the procedure, the highest level of pain was moderate, 18 people (60%), followed by mild pain level, 11 people (37%) and 1 person (3%) with severe pain level. Pain is defined as a condition that affects a person and its extent is known if someone has experienced it. Pain is a condition in the form of an unpleasant feeling that is very subjective because each person feels pain in terms of scale or level, and only that person can explain or evaluate the pain they experience. The body organs that act as pain receptors are free nerve endings in the skin that respond only to strong, potentially damaging stimuli (Fitriahadi E & utami I, 2020).

Perineal wound pain is a physiological condition that occurs in postpartum mothers due to wounds/scar tissue that arise due to damage to the perineum or an episiotomy during the birth process. Many women are not ready to have children because they imagine the pain they will experience during the birthing process. All pregnant women who are about to give birth feel afraid of going into labor because of the pain they experience during the birth process, starting from uterine contractions during the process of expelling the baby and placenta to perineal wound pain due to tearing or episiotomy which is carried out to facilitate the process of expelling the baby. But actually scientifically in the literature it is stated that labor pain can be managed. It doesn't disappear, but at least it can make the mother comfortable. Labor pain can actually be treated both pharmacologically and non-pharmacologically (Dyah Permata, 2018).

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 using drugs. Non-pharmacological methods that can be used are simple methods in the form of relaxation techniques, deep breathing techniques, birthing balls, warm compresses, massage therapy, acupuncture, etc. The warm compress technique is very effective in reducing the intensity of pain because it is related to the heat mechanism provided which can stimulate the release of the mother's endorphins, thus making the mother feel more comfortable and reducing the pain felt by the mother. Apart from that, warm compresses can vasodilate blood vessels and increase blood flow in the body, this is what makes oxygenation circulation smoother which can prevent muscle stiffness/muscle spasms, muscles become more relaxed, resulting in a reduction in pain (Pratiwi et al., 2021).

Pain levels are influenced by several factors, including age, gender, culture, environment and individual, anxiety and stress (Nurhanifah D & Sari RT, 2022). From the research results, it was found that the largest number were aged 20 - 35 years, 19 people (63%), this was in

accordance with existing theory. In theory, the age that is vulnerable to experiencing pain is < 20 years old, this is because at < 20 years old a person cannot properly understand the pain they feel, because actually pain depends on a person's response and that response will be different for each person.

Based on observations that have been made, there is a compatibility of several existing theories with activities in the field, which state that warm compresses have an effect on reducing pain. Pain is the main symptom or complaint that prompts a person to seek health care help. Objectively pain cannot be measured because the appearance or physical changes are not the same as what the patient feels.

Based on the research results, it was found that there was a change between the pre-test and post-test, namely the difference between the average pain level value of 1.42 and the Asymp value. Sig. (2-tailed) is < α=0.05, which means Ha is accepted or in other words there is an effect of warm compresses on reducing perineal wound pain in postpartum mothers at PMB Dince Safrina.

Results of the literature study carried out (Setiayani et al., 2023) Regarding the Effectiveness of Warm Compresses in Reducing the Intensity of Perineal Pain in Childbirth, it was found that the intensity of labor pain in the 1st stage can decrease when a warm compress intervention is given to the perineum, because it can reduce muscle spasm and increase blood flow, thereby providing a warm and calming effect. Warm compress therapy is effective in reducing pain in the first stage of labor.

The same opinion was also given by (Soeparno, 2020) in research on the Effect of Giving Warm Compresses on Reducing the Intensity of Labor Pain in the First Stage of the Active Phase, where from the results of research conducted on the intensity of labor pain in the first stage of the active phase, there was an effect of giving warm compresses on reducing the intensity of labor pain in the first stage of the active phase. Before giving a warm compress, the average pain level of mothers in labor experienced moderate-severe pain and after giving a warm compress for 15-20 minutes, the average pain intensity of mothers in labor became mild-moderate.

Midwives as health service workers, especially in the field of maternal and child health, are an important factor in the birthing process as birth attendants. It is a requirement that midwives can also become innovators by using the latest methods to provide maternal care, one of which is complementary methods which are currently being widely developed in the world of health, especially midwifery. A birthing mother has the right to receive high quality maternity care so that she can avoid discomfort during the birthing process.

CONCLUSIONS AND SUGGESTIONS

The results of the research showed that the respondents' pain level before the procedure was carried out was the highest at the severe pain level, 22 people (73%), followed by the moderate

pain level, 8 people (27%). For respondents' pain levels after the procedure, 18 people (60%) had moderate pain levels, followed by 11 people (37%) with mild pain levels and 1 person (3%) with severe pain levels. The results of the analysis using the Wilcoxon Signed Ranks Test obtained the Asymp value. Sig. (2-tailed) is < α=0.05, which means Ha is accepted so it can be concluded that there is an effect of warm compresses on reducing perineal wound pain in postpartum mothers at PMB Dince Safrina.

It is hoped that this research can be used as consideration in overcoming the problem of perineal wound pain in postpartum mothers by health workers and can be used as an illustration for future researchers and it is hoped that it can be used as a reference for further research on non-pharmacological pain management.

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