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The Effectiveness of Giving Cold Compress in Pain Reduction Intensity of Perineal Wound of Postpartum Mother



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Abstract

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Perineal wound pain is very likely to cause problems for the postpartum mothers. In the process of childbirth often occurs perineal wound, for some cases, it will heal permanently, but if the wound is wide enough can be sutured to the perineum. Perineal repair not only giving some benefits, but also can cause pain. One way to deal is by applying non-pharmacological pain management, the way is by giving cold compresses in the form of ice bags, it will result smaller risk. The purpose of this study was to provide cold compress therapy in scars to reduce pain. Methods: Posttest only control group design. The population in this study was 30 postpartum mothers in Kanigoro Health Centers by using purposive sampling. The sample was 16 respondents. The independent variable was cold compress, while the dependent variable was pain in the perineal wound. The instrument used Standart Operating Prosedure. Results: Fisher Exact Probability Test shows $p = 0.003$ ($\alpha = 0.05$). It could be concluded that giving cold compress could reduce the problem in perineal wound for postpartum mothers in the Kanigoro Health Center area. Along with this study, respondents are expected to actively ask questions, learn about problems during and after giving birth, especially not only learn about the technique of giving cold compresses to the perineum, but also about the provided comments.

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INTRODUCTION

Puerperium is a period that begins after the placenta comes out and ends when uterine cavity return to their original state (before pregnancy). The puerperium lasts for about 6 weeks. In the puerperium period, usually ensue injuries to the birth canal. Injuries to the vagina and perineum are generally not extensive and will heal permanently (healing by itself), but if the wound is a large enough, it can be hect to the perineum. (Sulistyawati, 2009).

Pain in perineal wounds greatly interferes with the comfort of the mother which results in difficulty during bowel movements, urination and insomnia. This condition will last for several weeks to one month new, therefore intervention and treatment is needed to reduce the pain. Pain management can be done pharmacologically and nonpharmacologically. Pharmacological pain management is risky for infants because it enters the circulation of blood vessels in breast while nonpharmacologically is safer to apply because it has less risk, does not cause side effects and also uses physiological processes (Yeyeh, 2010). Multiple nonpharmacologically management consist deep breath relaxation techniques, massage stimulating point and cold compress therapy. Deep breath relaxation techniques are pain-relieving techniques that provide many the greatest input due to relaxation can maintain components of the sympathetic nervous system in a state homeostatic so as not to increase the increase blood supply (Marwati, 2017). Massage stimulating point along the spinal cord meridian which is transmitted through large fibers to formatio reticular, thalamus and body systems will release endorphins (Cunningham, 2013). However, cold compress therapy is a non pharmacological method to reduce the most appropriate pain for perineal pain due to stimulation with a cold compress has an effect analgesic with slow speed nerve conduction resulting in pain impulses that are reach the brain less. One way to deal with non-pharmacological pain is by giving a cold compress in the form of an ice pack. It is an ice pack that is packaged using an ice bag and filled with ice cubes then wrapped in something clean like a washcloth use or sterile gauze (Potter & Perry, 2006).

Based on a survey conducted by studyers on 7 February 2019 at BPM Sri Wahyuni, STr.Keb Jatinom Village, Kanigoro District, Blitar Regency, there were 40 postpartum mothers from January 2018 to January 2019, 40 people were born at

midwives' house and 30 were born in the hospital. From the data of postpartum mothers in January 2018 until January 2019 where 60% of postpartum mothers get stitches and 40% without stitches. Of the 60% of mothers who get 100% of new hecing, they overcome this pain with analgesic drugs, so the studyers wanted to try to do a cold compress to reduce the pain of stitches.

Given these problems, the studyers were interested in conducting study on "the effectiveness of giving cold compresses to the reduction of perineal wound pain in postpartum mothers in the working area of Kanigoro Public Health Center in Blitar district". The general objective of the study was to determine the effectiveness of giving cold compress to the reduction of perineal wound pain in postpartum mothers in the working area of Kanigoro Public Health Center in Blitar district, (1) Identifying perineal wound pain in postpartum mothers which included in the treatment group in the working area of Kanigoro Public Health Center in Blitar District (2) Identifying perineal wound pain in postpartum mothers including the control group in the working area of Kanigoro Health Center in Blitar Regency (3) Analyzing the administration of cold compresses that aim to reduces perineal wound pain in postpartum mothers in the working area of Kanigoro Health Center in Blitar Regency. Benefits for respondents are they are be able to improve their ability and having new knowledge in overcoming the problem, especially about reducing pain in perineal wounds.

METHODS

The design of the study used "Pre-Experimental" design. The subject of this study was 16 postpartum mothers, with 8 respondents as the treatment group and 8 respondents as the control group. The subject of this study was selected by Purposive Sampling by making direct observations on the use of cold compresses and treatment of perineal wounds. The subjects were those who live in the area of Kanigoro Public Health Center in Blitar district with some criteria (a) postpartum mothers who gave birth in the range 1st to 7th day (b) postpartum mother without complications (c) postpartum mother who could not bear to eat some prohibited food (d) postpartum mother who consumed analgesic medicine. The Exclusion criteria in this study were postpartum mothers who did not get perineal repair. The method was by giving

a cold compress in the form of an ice pack. It was an ice pack packaged with an ice bag and filled with ice cubes then wrapped in something clean

like a washcloth use or sterile gauze. The instrument used SOP. The data was analyzed by Fisher Exact Probability Test with the level of significance was 0,05.

RESULTS

Table 1 Distribution of characteristic of respondent based on postpartum days

No	Postpartum	f	%
1	< 7 days	16	100
2	≥ 7 days	0	0
Total		16	100

Puerperal women who get stitches complain of pain in less than 7 days.

Table 2 Distribution of characteristic of respondent based on perineal wound pain in the treatment group

Pain Category	Day 2		Day 3		Day 4		Average	
	f	%	f	%	f	%	f	%
Severe	0	0	0	0	0	0	0	0
Mild	8	100	8	100	8	100	8	100

All respondents (100%) who received cold compress treatment did not experience pain during mobilization.

Table 3 Distribution of characteristic of respondent based on perineal wound pain in the control group

Pain Category	Day 2		Day 3		Day 4		Average	
	f	%	f	%	f	%	f	%
Severe	6	75	6	75	6	75	6	75
Mild	2	25	2	25	2	25	2	25

In the absence of treatment in the respondents, identified the majority (75%) felt severe pain in the suture wound, especially during mobilization.

Table 4 Analysis of pain category of perineal wound pain with the *Fisher Exact Probability Test*

No	Pain Category	Treatment Group	Control Group
1	Severe	0	6
2	Mild	8	2
		$\rho = 0,003$	$\alpha = 0,05$

DISCUSSION

Identification of Treatment Groups

From the results of the study in the treatment group, 100% or 8 respondents were included in the category of mild pain in perineal wounds. In the treatment group after cleaning the hecting area, respondents were given cold compress therapy, whereas in the control group after cleaning the hecting area, respondents were not given cold compress therapy. The treatment group was observed for 3 days with cold compress therapy.

The intensity of pain in the perineal wound after being given a cold compress was reduced. Cold compress were provided using a cold liquid with a temperature of 15 C for 5-10 minutes. Cold compress were given to get a local effect by using ice bags, ice colar, ice gloves and disposable coolers. Giving compresses in cold temperatures will reduce the pain impulses so that slowly able to reduce the intensity of pain in the wound (Potter & Perry, 2005).

Giving cold compresses to the perineal wound should only be done within 5-10 minutes in the first 24-48 hours after partum using cold liquid with a temperature of 15 C, because if it is too long then the blood tissue will die and blood supply also decreases as a result of vasoconstriction of blood vessels (Koezier, 2009).

This is in line with study conducted by Khotijah (2011) on the effectiveness of cold compresses on reducing the intensity of pain in fractures. The selected therapy is to use cold compresses, where in the study, she used the control and treatment groups. The treatment groups experienced reduce in pain which was very significant.

Control Group Identification

In the control group no cold compress therapy was given to the sutured wound, but observation was continued for 3 days as the treatment group.

From the results of the study in the control group, it was found that 75% or 6 respondents in the control group were in the category of severe perineal wound pain and 25% were in the category of moderate perineal wound pain. Pain is a subjective sensory and unpleasant emotional experience based on tissue damage that is felt in where the damage occurs (Perry & Potter, 2006).

There are several factors that can affect the occurrence of pain in suture, such as physiological

conditions, psychological conditions and health. The physiological factor in the questions is contraction. Muscle movements will cause pain because the muscles of the uterus extend and then shorten. The intensity of pain from opening one to opening ten will increase in height and more often depend to the strength of the contractions and the baby's pressure on the pelvic structure followed by stretching and even tearing of the lower birth canal. Another factor is psychological factors, namely excessive fear and anxiety that will affect the pain. Every mother has her own version of labor pain and childbirth. This is because the threshold for pain stimulation is different and very subjective to every person. Factors of medical staffs who do not understand labor procedures and lack of infrastructure in labor can also affect the intensity of pain, especially pain in perineal wounds (Andarmoyo, 2013).

From the results of the study Anugerah et al, (2017) about the effect of giving cold compress therapy to postoperative pain ORIF (Open Reduction Internal Fixation) in fracture patients, states that of the 10 respondents before being given pain intensity therapy at 3.7 (moderate pain) this condition was easy to seen because the respondent looks different when they have been given therapy, their pain intensity decreases to 2.9 (mild pain). Respondents were feeling pain when they are resting, when they were moving, but the pain was felt to be very strong when doing the activity.

Giving Cold Compresses Reduces The Intensity Of Pain In The Perineal Suture

Cold compress therapy is a non pharmacological method to reduce the most appropriate pain for perineal pain due to stimulation with a cold compress has an effect analgesic with slow speed nerve conduction resulting in pain impulses that are reach the brain less. One way to deal with non-pharmacological pain is by giving a cold compress in the form of an ice pack. It is an ice pack that is packaged using an ice bag and filled with ice cubes then wrapped in something clean like a washcloth or sterile gauze (Potter & Perry, 2006).

From the results of observations for 3 days, in the treatment group perineum wound in the postpartum mothers in the category of inconvenience and in the control group still felt severe and moderate pain on average in the new

period 2-4 days. These results proved that the administration of cold compress therapy could reduce perineum pain. In addition, the administration of cold compress therapy could help puerperal women to facilitate early mobilization, due to a decrease in pain in the suture wound. mild. In other hand, the control group tended to be more difficult to experience pain reduction, although there was a small portion (25%) who experience a decrease in pain (moderate pain), this was because of the pain threshold of the postpartum mothers is low.

From the statistical results of the Fisher Exact Probability Test between the treatment group and the control group it was found that 8 respondents (100%) of the treatment group were in the mild pain category. Whereas, 6 respondents (75%) in the control group experienced pain and 2 respondents (25%) were in moderate pain category. According to the Fisher Exact Probability Test results obtained significance value $\tilde{n} = 0.003$. The level of significance set was at $\alpha = 0.05$. From these provisions, it could be concluded that the administration of cold compress therapy could reduce the pain of perineal wounds of postpartum mothers.

Pain management can be done pharmacologically and nonpharmacologically. Pharmacological pain management is risky for infants because it enters the circulation of blood collected in breast milk while nonpharmacologically is safer to apply because it has a smaller risk, does not cause side effects and uses physiological processes. One way to deal with non-pharmacological pain is by giving a cold compress in the form of an ice pack, it is an ice which packaged using an ice bag filled with ice cubes and wrapped in something clean like a disposable washcloth or sterile gauze (Yeyeh, 2010).

From the results of study conducted by Maimunah, et al (2011) states that the uses of cold compress therapy was very effective in reducing the intensity of pain in dysmenorrhea, because with the administration of cold compresses there is a shift of pain perception into a dominant cold feeling so that respondents feel more comfortable.

This is also in line with the results of Rahmawati's (2013) study which stated that of the 20 postpartum mothers with perineal injuries, before being given cold compresses 12 respondents (60%) were included in the moderate category, after being given a cold compress 15 respondents (75%) were included in the lightweight category. So overall,

it can be stated that the used of cold compress therapy is very effective in reducing pain intensity, especially pain in perineal wounds in postpartum mothers.

CONCLUSION

The results showed that (1) Perineal wound pain in postpartum mothers belonging to the treatment group in the working area of Kanigoro Health Center in Blitar, all respondents (100%) experienced mild pain (2) Perineal wound pain in postpartum mothers who belong to the control group in the Puskesmas work area Kanigoro Blitar ; 6 respondents (75%) were in the category of severe pain and 2 respondents (25%) experienced moderate pain (3) Giving cold compress therapy reduced pain in perineal wounds.

SUGGESTION

Respondents are expected to actively ask questions, learn about problems during and after giving birth, especially not only learn about the technique of giving cold compresses to the perineum, but also about the provided comments. Further studies are advised to study other non-pharmacological techniques to reduce perineal wound pain. To sum, if the pain of the perineal wound is resolved, the process of the puerperium will flow smoothly.

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