The 2nd Mitra Husada Health International Conference (MIHHICo) 2022
Volume 2 (2022) ISSN: 2988-3768

THE EFFECT OF GIVING ALOE VERA COMPRESS ON REDUCING BREAST MILK DAM PAIN IN POSTPARTUM MOTHERS BINJAI ESTATE HEALTH CENTER WORK AREA YEAR 2022

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ABSTRACT

Breast milk dams occur due to improper position and way of breastfeeding so that milk will collect in the area. The nipple area is not clean and the use of a tight bra can also be one of the causes of breast milk dam. With the occurrence of breast milk dam, the baby will not get breast milk exclusively. Breast engorgement will cause breast milk dam (ASI), as a result the baby does not get breast milk exclusively. Pain in the breast is caused by increased venous and lymphatic flow due to narrowing of the lactiferous ducts. In addition, breast pain is caused by stretching of the mammary tissue due to swelling that suppresses pain receptors. The general objective of this study was to analyze the effect of giving Aloe vera Compress to Reduction of Breastfeeding Dam Pain in postpartum mothers in the Binjai Estate Community Health Center Working Area in 2022. This type of research uses quantitative research with experimental methods. The research design used was a quasi-experimental design with one group pre-test-post-test design. In this study, to assess the level of pain using the Numeric Rating Scale observation sheet. In this study, no comparison group was used. the frequency distribution of respondent characteristics based on age in respondents who experienced breast milk dams in the Pre-test and Post-test data, it was found that the age of the majority of respondents experienced breast milk dams, namely with an age range of 20-25 years as many as 25 people (78.13%) and minorities at the age of 30-35 years as many as 7 people (21.88%). on the results of the statistical correlation test with Paired samples T Test Correlation, the results of the Pre-test and Post-test values Sig p = 0.00 <0.05, which means that the two variants are the same, and the Pre-test and Post-test groups it means that there is no significant difference in the pre-test and post-test data of the effect of giving aloe vera compresses on reducing breast milk dam pain in postpartum mothers.

Keywords: Aloe vera compres, breast milk dam pain,breastfeeding

INTRODUCTION

Data obtained from the World Health Organization (WHO) in 2018 regarding the coverage of exclusive breastfeeding (ASI) in the world is 39%.

Based on these data, the achievement of exclusive breastfeeding is still below the target where the coverage target set by WHO is 50%.(Ancient 2018). Based on data obtained from the United

Nations International Children's Emergency Fund (UNICEF) in 2018 it was found that around 17.2 million postpartum mothers in the world experienced problems such as sore nipples by 22.5%, breast milk dams caused by swollen breasts of 22.5%. 42%, 18% breast blockage, 1% mastitis and 6.5% breast abscess. According to data from the Indonesian Ministry of Health, in 2019 Data obtained from UNICEF regarding exclusive breastfeeding in 2018 children under the age of 6 months who received exclusive breastfeeding were 42%). Based on data obtained from the Indonesian Health Demographic Survey (IDHS) in 2019, it showed that in general it was 52%(Editia, Widjanarko, and Margawati 2021). Based on the national health profile of Indonesia in 2019, the percentage of Newborn Babies (BBL) who carried out Early Breastfeeding Initiation (IMD) was 75.58% and in the province of North Sumatra the percentage of IMD was 57.85%(Ministry of Health RI 2019).

Breast milk dams occur due to improper position and way of postpartum mothers who experienced breast milk dams amounted to 77,231 people (37.12%). Based on the data that has been obtained, the biggest problem experienced by many mothers in the world is the case of the breast milk dam which causes the breast milk to not flow smoothly(Veni 2020).

Based on data from the 2019 Health Profile of 277,925 newborns, it was reported that only 168,826 babies received early initiation of breastfeeding (IMD) (60.75%) there was an increase in the number of coverage of babies who received IMD compared to 2018 from 294,275 newborns, reported only 160,680 babies got BMI (54.6%)(Ministry of Health RI 2019). Breastfeeding so that milk will collect in the area. The nipple area is not clean and the use of a tight bra can also be one of the causes of breast milk dam. With the occurrence of breast milk dam, the baby will not get breast milk exclusively. Breast engorgement will cause breast milk dam (ASI), as a result the baby does not get breast milk exclusively.(Putu et al. 2019).

Mothers who experience problems in breastfeeding will have an impact on exclusive breastfeeding for babies. The phenomenon of mother's milk dam can inhibit the breastfeeding process, causing a less close relationship between mother and child. In addition, breast milk dams cause

inflammation of the mother's breasts and palpation feels hard, sometimes painful and often accompanied by an increase in the mother's body temperature, and there are signs of redness and fever. Breastfeeding mothers with problems with breast milk engorgement experience pain on a scale of 6-8. (severe pain) and 3-5 (moderate pain). Pain in the breast is caused by increased venous and lymphatic flow due to narrowing of the lactiferous ducts. In addition, breast pain is caused by stretching of the mammary tissue due to swelling that suppresses pain receptors. Based on data from the Indonesian Demographic Health Survey (IDHS), postpartum mothers who experienced problems with breastfeeding dams reached 77,231 people (37.12%). 95,698 people experienced breast milk dams, and in 2015 there were 76,543 mothers who experienced breast milk dams. According to the Indonesian Demographic and Health Survey Data in 2015 it was stated that there were 35,985 postpartum mothers or (15.60%) postpartum mothers, and in 2016 77,231 postpartum mothers experienced breast milk dams or (37.12%) mothers. breath. The impact of the problem of breast milk dams on the mother is the occurrence of edema in the breast, red tension and fever,(Putu et al. 2019).

METHODS

This type of research uses quantitative research with experimental methods. The research design used was a quasi-experimental design with one group pre-test-post-test design. In this study, to assess the level of pain using the Numeric Rating Scale observation sheet. In this study, no comparison group was used. The sample will be given a pre-test before being given an aloe vera compress and a post-test after being given an aloe vera compress. This study was conducted to analyze the effect of giving aloevera compresses on breast milk dam pain in postpartum mothers in the Binjai Estate Community Health Center Working Area in 2022. In the study, the population was all post partum mothers who experienced ASI dams in February-May in the Binjai Estate Community Health Center with a population of 64 people.

The sample is part of a number of characteristics possessed by the population used for research(Sujarweni wiratna 2020).

The sample used in this study were postpartum mothers who experienced breast milk dams in postpartum mothers in the working area of the Binjai Estate Public Health Center. The sample to be taken amounted to 32 people.

Research result

A. Univariate Analysis

1. Characteristics of Respondents Based on Age

From the results of the study, it was found that the characteristics of the respondents in postpartum mothers who experienced breast milk dams in the Binjai Estate Health Center Work Area.

Table Frequency Distribution of Respondents' Characteristics Based on Age in Postpartum Mothers Who Experienced Breast Milk Dams in the Binjai Estate Community Health Center Work Area

		Frequency	
Data Type	Age	F	%
Pre-Test & Post-test	20-25 Years	25	78.13%
	30-35 Years	7	21.88%
	Total	32	100%

Based on table the frequency distribution of respondent characteristics based on age in respondents who experienced breast milk dams in the Pre-test and Post-test data, it was found that the age of the majority of respondents experienced breast milk dams, namely with an age range of 20-25 years as many as 25 people (78.13%) and minorities at the age of 30-35 years as many as 7 people (21.88%).

2. Description of Respondents Pre-test and Post-test Pain Level

From the results of the study, it was found that the results of the pain level distribution frequency from the effect of giving aloe vera compresses on reducing breast milk pain in postpartum mothers are as follows.

Table Distribution of Frequency Based on Pre-test Giving Aloevera Compress to Reduction of Breast Milk Dam Pain in Postpartum Mothers in the Binjai Estate Community Health Center Working Area in 2022

		Frequency	
	Pain Level	F	%
Pret-test	0 No Pain	-	-
	1-3 Mild Pain	-	-
	4-6 Moderate Pain	13	40.62%
	7-9 Severe Pain	18	56.25%
	10 Very Severe Pain 1		3.125%
	Total	32	100%

Based on table of the pre-test data (before it was carried out) giving aloe vera compresses to respondents who

experienced breast milk dams, the majority were severe pain as many as 18 people (56,25%) and the minority of respondents who experined breast milk dams was with very is very severe pain as many as person (3,125%).

Table 4.3 Frequency Distribution Based on Post-test Effect of Aloevera Compress on Reduction of Breast Milk Dam Pain in Postpartum Mothers in the Binjai Estate Health Center Working Area in 2022

	Pain Level	Frequency	
		F	%
Post-test	0 No Pain	2	6.25%
	1-3 Mild Pain	20	62.5%
	4-6 Moderate Pain	10	31.25%
	7-9 Severe Pain	-	-
	10 Very Severe Pain	-	-
	Total	32	100%

Based on table 4.3 post- test (after the action) of giving aloe vera compresses to reduce breast milk dam pain in respondents, it was found that the highest majority of respondents who experienced breast milk dams with mild pain were 20 people (62.5%), and there was moderate pain as many as 10 people (31.25%), and the minority, namely no pain as many as 2 people (6.25%).

B.Bivariate Analysis

This bivariate analysis was used to see how the effect of giving aloevera compresses on breast milk dam pain in postpartum mothers in the working area of the Binjai Estate Public Health Center in 2022 using the Dependent Paired Samples T Test

	Paired Differences			*Interval Of The*				
Data Type	mean	*Std. Deviation*	*Std Error Mean*	*Lower*	*Upper*	*t*	*Df*	*Sig. (2-Tailed)*
Pre-est & Post-Test	4,188	,535	,095	3,995	4,380	44.27	31	,000

Table 4.6 Statistical Test Paired Samples Test Pre-Test And Post-Test Provision of Aloe Vera Compress Against Breastmilk Dam Pain in Postpartum Mothers in the Work Area of Binjai Estate Health Center

Based on table Paired Samples Test statistical test on the Pre-test and Post-test data, the results obtained are sig(2-Tailed) p = 0.000 < 0.005, there is a significant difference from the pre-test and post-test data, so it can be concluded that giving aloevera compresses to postpartum mothers

ISSN: 2988-3768

who experience breast milk dams have an effect on reducing breast milk dam pain in postpartum women in the working area of the Binjai Estate Health Center.

Table Comparison of Pretest and Posttest Pain Intensity Scores Giving Aloe Vera Compress to Breast Milk Dam Pain in Postpartum Mothers in the Binjai Estate Community Health Center in 2022

Data Type	N	Median (Max-Min)	Pvalue
Pre-test	32	4-10	0.00
Post-test	32	0-5	

Based on table the comparison of pretest and post-test pain intensity scores on the effect of giving aloe vera compresses on breast milk dam pain in postpartum mothers in the working area of the Binjai Estate Public Health Center, in the pre-test pain intensity score with a sample of 32 people the maximum-minimum value was obtained. of (4-10) with moderate to severe pain and P-value 0.00. In the post-test, the pain intensity score with a sample of 32 people was obtained with a maximum-minimum value of (0-5) with a pain level from no pain to moderate pain and a P-value of 0.00.

DISCUSSION

1. Differences in Pain Intensity Before and After the Action on the Effect of Giving Aloe Vera to Postpartum Mothers Who Have Breast Milk

Based on the results of calculations from the Paired Samples T Test, the results obtained sig(2-Tailed) p= 0.000 < 0.005, there is a significant difference from the pre-test and post-test data so that it can be concluded that giving aloevera compresses to postpartum mothers who experience dams. Breastfeeding has an effect on reducing breast milk dam pain in postpartum mothers in the working area of the Binjai Estate Health Center. The results of the study in the post-test group were significantly p value = 0.000.

In this study, it can be seen that there was a decrease in the intensity of pain which started before being given treatment (Pre-test). After being carried out or post-test the act of giving aloe vera compresses, the pain reduced after the treatment became mild pain as many as 20 people, which means that giving aloe vera compresses to

postpartum mothers who experience breast milk dams have an effect in reducing pain from severe pain to mild pain. This can happen because of the presence of tannins and saphonins, each of which has the ability to act as an anti-pain and anti-inflammatory. The cold effect given to aloe vera contains lignin which has a high absorption ability so that it makes a high sense of comfort and reduces pain in postpartum mothers who experience breast milk damming. Aloe vera compress can reduce swelling pain by stimulatingthe immune system to block the biosynthesis of prostaglandins.

Based on previous studies that have given aloe vera compresses to postpartum mothers who experience breast milk damming, aloe vera compresses are effective against breast swelling pain. Aloe vera contains a lot of water and various substances that can reduce pain so that the pain you feel will be reduced. Aloe vera contains anthraquinone, aloe emodin, bradykinase enzymes, carboxypeptidase, salicylates, tannins and saponins, each of which has the ability to act as an anti-pain. Aloe vera is cold and contains lignin which has a high absorption ability. The cold effect of aloe vera can increase comfort for mothers who experience swelling pain.

2. The Effect of Giving Aloevera Compress on Reducing Breast Milk Pain in Postpartum Mothers in the Work Area of the Binjai Estate Health Center in 2022

From the results of the study, it was found that post-test data that had been obtained showed that the intensity of pain in postpartum mothers who experienced breast milk dams, the value obtained was sig(2-Tailed) p = 0.000 < 0.005, this means that there is a significant difference from the pre-test data. and post-test so that it can be concluded that giving aloe vera compresses to postpartum mothers who experience breast milk dams have an effect on reducing breast milk dam pain in postpartum mothers in the working area of the Binjai Estate Health Center.

Aloe vera contains a lot of water and various substances that can reduce pain so that the pain you feel will be reduced. Aloe vera contains anthraquinone, aloe emodin, bradykinase enzymes, carboxypeptidase, salicylates. The Effectiveness of Aloe Vera Compress on Painful Breast Swelling in Postpartum Mothers who experience breast milk dam contains tannins and saponins, each of which has the ability to act as anti-pain and anti-inflammatory. After postpartum, there is a change in the

lactation hormone, namely oxytocin and prolactin, each of which has a task for milk production and milk production, but its work is influenced by the baby's sucking. Inadequate suckling of the baby is one of the factors that cause breast engorgement.

Breast engorgement occurs due to increased venous blood and lymph flow and narrowing of the lactiferous ducts due to the accumulated milk in the breast. This can lead to pain, besides that the pain that arises can also be caused by stretching of the mammary tissue due to swelling that occurs so that it suppresses pain receptors. When pain occurs, there will be a release of pain neurotransmitters, one of which is prostaglandins. Aloe vera compresses can reduce swelling pain by stimulating the immune system to block prostaglandin biosynthesis. In addition, the pain that arises can also be caused by stretching of the mammary tissue due to swelling that occurs so that it suppresses pain receptors. When pain occurs, there will be the release of pain neurotransmitters, one of which is prostaglandin. Aloe vera compresses can reduce swelling pain by stimulating the immune system to block prostaglandin biosynthesis. In addition, the pain that arises can also be caused by stretching of the mammary tissue due to swelling that occurs so that it suppresses pain receptors. When pain occurs, there will be the release of pain neurotransmitters, one of which is prostaglandin. Aloe vera compresses can reduce swelling pain by stimulating the immune system to block prostaglandin biosynthesis.

CONCLUSION

In accordance with the results of the study, several conclusions can be drawn as follows:

1. Prior to giving aloevera compresses to postpartum mothers who experienced breast milk dams, the highest proportion was severe pain with a percentage (56.25%) and the lowest was with very severe pain as many as 1 person with a percentage (3.125%).
2. After the action of giving aloe vera compresses to reduce breast milk dam pain in postpartum mothers, it was found that, the highest majority of postpartum mothers who experienced breast milk dams with mild pain were 20 people with a frequency (62.5%), and there were 10 moderate pains. people with frequency (31.25%), and the lowest is no pain as many as 2 people with frequency (6.25%)

3. Based on the results of calculations from the Paired Samples T Test, the results obtained sig(2-Tailed) p= 0,00 < 0.005, there is a significant difference from the pre-test and post-test data so that it can be concluded that giving aloe vera compresses to postpartum mothers who experience dams. Breastfeeding has an effect on reducing breast milk dam pain in postpartum mothers in the working area of the Binjai Estate Health Center.

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