

THE EFFECT OF MORINGA LEAF COMPRESSES ON BREASTFEEDING DAM PAIN IN POST PARTUM MOTHERS

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ABSTRAK : PENGARUH KOMPRES DAUN KELOR TERHADAP NYERI BENDUNGAN ASI PADA IBU POST PARTUM

Latar Belakang Di Indonesia angka kejadian bendungan ASI terbanyak terjadi pada ibu-ibu bekerja sebanyak 24,8% dari ibu menyusui (Departemen Kesehatan RI, 2022). Di Provinsi Lampung, dari data Survei Demografi Tahun 2022 di dapatkan ibu nifas yang mengalami bendungan ASI sebanyak 23.870 orang dari 91.398 orang ibu nifas (Survei Demografi Lampung 2022).

Tujuan penelitian untuk mengetahui pengaruh kompres daun kelor terhadap nyeri bendungan asi pada ibu post partum di Wilayah Kerja Puskesmas Wanna Melinting Lampung Timur Tahun 2023.

Metode jenis penelitian kuantitatif. Dalam penelitian ini menggunakan desain penelitian metode pre Eksperimental dengan pendekatan *one group pretest-posttest design*. Populasi dalam penelitian ini adalah ibu nifas dengan masalah bendungan pada bayudara sebanyak 64 ibu di Desa Tanjung Aji Kec. Melinting Lampung Timur Tahun 2023. Penelitian ini dilakukan dari bulan Februari hingga Juli tahun 2023, dan dilakukan terhadap 35 ibu postpartum, dengan diberikan kompres daun kelor untuk membantu menurunkan intensitas nyeri pada bendungan asi. Analisa data menggunakan uji univariat dan bivariat dengan uji statistika wicoxon.

Hasil Rata-rata skala nyeri terhadap bendungan asi sebelum kompres daun kelor pada ibu post partum di Desa Tanjung Aji Kec. Melinting Lampung Timur Tahun 2023 sebesar 7.23 dan nilai standar deviatioan 0.598. Rata-rata skala nyeri terhadap bendungan asi sesudah kompres daun kelor sebesar 3.94 dan nilai standar deviatioan 0.873.

Kesimpulan hasil nilai P value 0,000 yang bermakna Ha diterima dan Ho ditolah yang artinya terdapat pengaruh kompres daun kelor terhadap nyeri bendungan asi pada ibu post partum di Wilayah Kerja Puskesmas Wanna Melinting Lampung Timur Tahun 2023. Saran respoden mampu menerapkan terapi berupa kompres dengan daun kelor dalam membantu dalam menurunkan nyeri pada payudara pada payudara sehingga dapat meningkatkan kualitas menyusui pada bayi, dan bagi PKM mampu memberikan edukasi mengenai penatalaksanaan nyeri bendungan asi dengan kompres daun kelor.

Kata kunci : bendungan asi, daun kelor, nyeri

ABSTRACT

Background In Indonesia, the highest incidence of ASI dams occurs in working mothers, as much as 24.8% of breastfeeding mothers (RI Ministry of Health, 2022). In Lampung Province, from the 2022 Demographic Survey data, 23,870 of 91,398 postpartum mothers experienced breast milk retention (Lampung Demographic Survey 2022). The aim of this study was to determine the effect of Moringa leaf compresses on breast milk dam pain in post partum mothers in the Work Area of the Wanna Melinting Health Center, East Lampung, in 2023.

In this study the authors used a type of quantitative research. In this study, the research design used the pre-experimental method with the one group pretest-posttest design approach. The population in this study were postpartum mothers with dam problems in their newborns as many as 64 mothers in Tanjung Aji Village, Kec. Melinting East Lampung in 2023. This research was conducted from February to July 2023, and was carried out on 35 postpartum mothers, by being given Moringa leaf compresses to help reduce the intensity of pain in breast milk. Data analysis used univariate and bivariate tests with the Wicoxon statistical test.

The average pain scale for breast milk before compressing Moringa leaves in post partum mothers in Tanjung Aji Village, Kec. Melinting East Lampung in 2023 is 7.23 and the standard deviation value is 0.598. The average pain scale for breast milk after compressing Moringa leaves was 3.94 and the standard deviation value was 0.873. The conclusion of the results is a P value of 0.000 which means that Ha is accepted and Ho is rejected, which means that there is an effect of Moringa leaf compresses on breast milk dam pain in post partum mothers in the Work Area of the Wanna Melinting Health Center, East Lampung in 2023. By conducting this research, it is

hoped that respondents will be able to apply therapy in the form of compresses with Moringa leaves in helping to reduce breast pain in the breast so that it can improve the quality of breastfeeding in infants, and for PKM it is able to provide education regarding the management of breast milk dam pain by compressing Moringa leaves.

Keywords: breast milk dam, Moringa leaves, pain

INTRODUCTION

Breast milk dam is a dam of milk due to narrowing of the lactiferous ducts or the glands not being emptied completely or due to abnormalities in the nipples (Mochtar, 2016). The occurrence of breast milk dams in postpartum mothers is caused by several factors, namely internal factors including physical, psychological, work, knowledge, personal desires (motivation) and experience. External factors include baby, environmental, socio-cultural factors, and motivation from various parties, including family, neighbors and health workers themselves (Handoko, 2017). Most primiparous postpartum mothers still appear stiff and anxious about breastfeeding their babies.

According to the latest WHO data in 2022 in the United States, the percentage of breastfeeding women who experience breast milk dams is an average of 9,849 (89.05%) out of 19,798 postpartum mothers, in 2022 mothers who experience breast milk dams will be 8,988 (68.97%) out of 14,978. UNICEF stated that scientific evidence released by the Pediatrics Journal in 2022 revealed data that around 18,949,421 million mothers experienced breastfeeding problems worldwide, consisting of 59.3% sore nipples, 56.92% breast dams and 10.5% mastitis. % (WHO, 2022).

In Indonesia, the highest incidence of breast milk dams occurs in working mothers, 24.8% of breastfeeding mothers (Indonesian Ministry of Health, 2022). In Lampung Province, from the 2022 Demographic Survey data, it was found that 23,870 postpartum mothers experienced breast milk dams out of 91,398 postpartum mothers (2022 Lampung Demographic Survey). The incidence of breast milk dams in East Lampung Regency is 28-39% (15-18 incidents out of 100 breastfeeding mothers) (East Lampung Health Office, 2022). Based on the Partum data report in Tanjung Aji Village, Kec. Melinting East Lampung in 2022 the number of breast milk dam incidents will be 10 (1-3 incidents out of 100 breastfeeding mothers) (Village Report, 2022).

Based on the initial survey in the Wanna Melinting Community Health Center Working Area, East Lampung in 2023, starting from January-May, there were 76 postpartum mothers in 6 villages in the working area of the Community Health Center. Based on these results, 45.4% of postpartum

mothers experience breast milk dams, while the incidence of other complications such as mastitis is 21.9% and abscesses are 32.7% (PKM, 2023). Based on the results of interviews conducted with 4 postpartum mothers who had problems with breast milk dams and breastfeeding their babies, they said their breasts felt painful and swollen after giving birth and felt pain when breastfeeding. The mothers also said that when breastfeeding their babies often winced in pain and cried. Based on the number of postpartum mothers at PKM Wanna Melinting, the incidence of pain due to swelling of the breasts is 64 postpartum mothers.

It is known that there is an increase in the incidence of breast milk dams which will greatly affect the postpartum period due to failure to provide breast milk to the baby. One of the reasons why exclusive breastfeeding is not achieved is that the baby does not get enough breast milk and the production of breast milk increases, breastfeeding is late, the relationship with the baby (bonding) is not good, and it can also be due to restrictions on breastfeeding time so that inflammation can occur in the mother's breasts and palpation can feel hard, sometimes painful and often accompanied by an increase in the mother's body temperature, and there are signs of redness and fever (Manuaba, 2013).

According to research, the highest incidence of breast milk dams in Indonesia is in working mothers, as many as 16% of breastfeeding mothers, Indonesian Ministry of Health (2017). Due to the busyness of family and work, the level of care and attention given to mothers in carrying out breast care will tend to result in an increase in the incidence of breast milk dams. Apart from that, the causes of breast milk dams occur due to poor breastfeeding positions, limiting breastfeeding, limiting the baby's time with the breast, giving formula milk supplements to babies, using a breast pump without indication, causing excess supply, and breast implants (Ministry of Health, 2017)

Factors that cause breast milk dams include the frequency of breastfeeding, the baby's inactive sucking, the mother's motivation to breastfeed, breast care, breastfeeding techniques, providing formula milk supplements for the baby, and using a breast pump without indication, causing excess supply. When breast milk is normally produced, the

breasts become very full. This is physiological, and with effective sucking and removal of breast milk by the baby, the feeling recovers quickly. However, it can develop into dams, the breasts feel full of breast milk and tissue fluid. Venous and lymphatic flow is blocked, milk flow becomes obstructed and pressure in the milk ducts and alveoli increases. The breasts become swollen and edematous. Symptoms that often appear when breast milk dams occur include swollen breasts, breasts feeling hot and hard and the mother's body temperature up to 38 degrees Celsius. (Wulandari and Handayani, 2014)

The impact of breast milk dams on the mother results in intraductal pressure which will affect various segments of the breast, so that pressure throughout the breast increases, as a result the breast often feels full, tense and painful (WHO), even though it is not accompanied by fever (Nevyda Ardyan, 2014). Apart from that, the impact on the baby is that the baby has difficulty sucking, the baby is not breastfed adequately so that the baby does not receive exclusive breast milk as a result, the baby's nutritional needs will not be met due to the lack of intake that the baby gets (Musriah, 2017)

Management of breast milk dam problems uses pharmacological management using antibiotics, antipyretics or fever reducers, and analgesics or pain reducers as well as drinking plenty of fluids and rest to reduce systemic reactions (fever). Whenever possible, mothers are advised to do lactation exercises (breastfeeding exercises), namely moving their arms in rotation so that the shoulder joints move in the same direction. This movement will help improve blood and lymph circulation in the breast area so that static can be avoided, which means reducing the possibility of breast milk accumulating in the breast (Sarwono, 2013).

Breast and nipple care is very important in the lactation process. These two treatments are often a "savior" for mothers in getting through the early stages of breastfeeding which can sometimes feel very difficult. For example, if sore nipples occur, the abrasions are often only mild. A good start will undoubtedly make the rest of the process run well too. This good start cannot be separated from the mother's own knowledge in caring for her breasts. Likewise with breastfeeding, mothers who know more about breast care tend to have a greater desire to breastfeed (Riksani, 2012 in Pitria, 2018). Non-pharmacologically by giving a compress of Moringa Oleifera leaves. Since ancient times, this plant has been known to contain Moringa leaves, such as tannins, steroids, triterpenoids, flavonoids, saponins, anthraquinones and alkaloids. This

compound has anti-inflammatory, antibiotic, detoxification and antibacterial properties (Aris Widiyanto, 2020).

From several researchers, Moringa leaves contain flavanoids which are efficacious as an analgesic whose mechanism of action is to inhibit the action of the cyclooxygenase enzyme thereby reducing pain and flavanoids also inhibit neutrophil degranulation so as to inhibit the release of cytokines, free radicals and enzymes that play a role in inflammation (Aris Widiyanto, et al., 2020).

Research conducted by Murtini (2022) The results showed that before treatment the average breast swelling was on a scale of 3, while after treatment the average breast swelling was on a scale of 1. In statistical testing using the Wilcoxon test, a p-value of 0.000 was obtained. Because ($\alpha < 0.05$) it was concluded that the Moringa leaf compress was effective in reducing the scale of breast swelling in postpartum mothers.

In this study, researchers focused on giving Moringa leaf compresses to treat breast swelling because they are easy to obtain. Since ancient times, this plant has been known to contain Moringa leaves, such as tannins, steroids, triterpenoids, flavonoids, saponins, anthraquinones and alkaloids. This compound has anti-inflammatory, antibiotic, detoxification and antibacterial properties (Aris Widiyanto, 2020).

The impact of breast milk dams, namely static in the lymph vessels, will result in intraductal pressure which affects various segments of the breast, so that the pressure on the entire breast increases, as a result the breasts often feel full, tense and painful even though they are not accompanied by fever. It can be seen that sometimes the breasts are wider so it is difficult for the baby to suck. As a result, the baby will not drink enough or become dehydrated, which will cause dry skin or lips, infrequent urination, sunken eyes, rapid breathing, lethargy and sleepiness. Breast milk dams that are not breastfed adequately eventually result in mastitis (Manuaba, 2013)

Based on the results of the background description above, the author wants to conduct research with the title "The Effect of Moringa Leaf Compress on Breast Milk Dam Pain in Post Partum Mothers in the Working Area of the Wanna Melintang Community Health Center, East Lampung in 2023"

RESEARCH METHODS

In this research the author uses a quantitative type of research, this type of research is a type of research to get an accurate picture of the characteristics of a problem that classifies data and

collects data related to numbers both obtained from measurement results and the value of the data obtained. This research was conducted in the Wanna Melinting East Lampung Community Health Center Work Area in 2023, and was carried out in 6 villages under the auspices of the community health center. This research was conducted from February to July 2023. This research used a pre-experimental method research design with a one group pretest-posttest design approach. The population in this study was a total of 64 postpartum mothers in the Wanna Melinting Health Center Working Area, East Lampung in 2023. The sample in this study was post partum mothers in the Wanna Melinting East Lampung Health Center Working Area in 2023 with a total of up to 35 mothers with pain problems in breast milk dams. . The sampling technique in this research is purposive sampling

RESEARCH RESULTS

Based on table 1 above, it can be seen that from the results of the characteristics of research conducted on postpartum mothers with pain problems due to breast milk dams in the Wanna Melinting Health Center Working Area, East Lampung in 2023, based on the characteristics of the mother's age, the highest number is 30 years old with a total of 9 (25.7%) respondents, the educational characteristics of the most respondents were high school with 18 (51.4%) respondents, the most job characteristics were housewives with 17 (48.6%) respondents, the most parity characteristics were multipara with 26 (74.3%) respondents.

Table 1
Characteristics of Respondents in the Wanna Melinting East Lampung Community Health Center Work Area in 2023

Characteristics	Jumlah	Frekuensi (%)
Usia		
24 tahun	2	5.7
25 tahun	2	5.7
26 tahun	3	8.6
28 tahun	7	20.0
29 tahun	5	14.3
30 tahun	9	25.7
33 tahun	3	8.6
34 tahun	3	8.6
35 tahun	1	2.9
Pendidikan		
Sarjana	7	20.0
SMA	18	51.4
SMP	10	28.6
Pekerjaan		
Honorer	3	8.6
IRT	17	48.6
Pedagang	6	17.1
Pegawai	6	17.1
Paritas		
Multipara	26	74.3
Primipara	9	25.7

Normality Test

Based on table 2 above, it can be seen that the sig value of the Shapiro-Wilk test is 0.000 for the breast milk dam pain result value before and 0.000 for the breast milk dam pain result value after with the Shapiro-Wilk test sig value <0.05. Thus, it can be concluded that the variable data in this study is not normally distributed, so for the next stage the dependent t-test cannot be carried out and continue using the Wilcoxon test.

Tabel 2
Hasil Uji Normalitas/ Test of normality

Skala nyeri bendungan asi	N	P-Value	Keterangan
Skala nyeri sebelum kompres daun kelor	35	0,000	Tidak normal
Skala nyeri sesudah kompres daun kelor		0,000	Tidak normal

Univariate Analysis

Based on table 3 above, it can be seen from 35 respondents that the average value of the pain scale for breast milk dams before Moringa leaf compresses in postpartum mothers in Tanjung Aji Village, Melinting District, East Lampung in 2023 is

7.23 and the standard deviation value is 0.598, the standard error value is 0.101 with the minimum value for the breast milk dam pain scale of 6, namely and the maximum value for the breast milk dam pain scale which is 8.

Table 3
Average Pain Scale for Breast Milk Damage Before Moringa Leaf Compress in Post Partum Mothers in Tanjung Aji Village, District. Melinting East Lampung in 2023

Breast Milk Bed Pain Scale	N	Mean	Std. Deviation	SE	Min-Max
Before compressing Moringa leaves	35	7.23	0.598	0.101	6-8

Tabel 4
Average Pain Scale for Breast Milk Dam After Moringa Leaf Compress in Postpartum Mothers in the Working Area of the want to Melinting Health Center in East Lampung in 2023

Breast Milk Bed Pain Scale	N	Mean	Std. Deviation	SE	Min-Max
After compressing Moringa leaves	35	3.94	0.873	0.147	2-5

Berdasarkan tabel 4 diatas dapat dilihat dari 35 responden nilai rata-rata skala nyeri terhadap bendungan asi sebelum kompres daun kelor pada ibu post partum di Desa Tanjung Aji Kec. Melinting Lampung Timur Tahun 2023 sebesar 3.94 dan nilai

standar deviatioan 0.873 nilai standar Error sebesar 0.147 dengan nilai minimal untuk skala nyeri bendungan asi 2 yaitu dan nilai maksimal untuk skala nyeri bendungan asi yaitu 5.

Bivariate Analysis

Table 5
The Effect of Moringa Leaf Compress on Breast Milk Dam Pain in Post Partum Mothers in the Working Area of the want to Melinting Health Center in East Lampung in 2023

Breast Milk Bed Pain Scale	N	Mean	Beda mean	Mean rank	Sum rank	p-value
Before compressing Moringa leaves	35	7.23	3,29	18.00	630.00	0,000
After compressing Moringa leaves		3.94				

Based on the results of the table above, it shows that the results before and after giving Moringa leaf compresses to postpartum mothers in the Working Area of the want to Melinting Health Center, East Lampung In 2023, there was a decrease in the intensity of pain in the breast milk dam before and after being given Moringa leaf compresses by 3.29 from all respondents, namely 35 respondents, with the results of a P value of 0.000 which means H_a is accepted and H_o is tolak, which means there is an effect of Moringa leaf compresses on pain breast milk dam on postpartum mothers in the Working Area of the want to Melinting Health Center, East Lampung in 2023

DISCUSSION

Univariate Analysis

Average Pain Scale of Breast Milk Dam Before Moringa Leaf Compress in Post Partum Mother in Tanjung Aji Village, Melinting District, East Lampung in 2023

The average value of the pain scale for breast milk dams before Moringa leaf compresses in postpartum mothers in Tanjung Aji Village, Melinting District, East Lampung in 2023 is 7.23 and the standard deviatioan value is 0.598, the standard

error value is 0.101 with the minimum value for the breast milk dam pain scale of 6, namely and the maximum value for the breast milk dam pain scale, which is 8.

Factors that cause breast milk dams include the frequency of breastfeeding, inactive baby suction, maternal motivation to breastfeed, breast care, breastfeeding techniques to provide formula milk supplements for infants, and using breast pumps without indication causing excess supply. When normal milk is produced, the breasts become very full. This is physiological, and with effective suction and removal of milk by the baby, the taste recovers quickly. However it can develop into a dam, the breast feels full of milk and tissue fluid. Venous and lymphatic flow is blocked, milk flow becomes obstructed and pressure on the milk ducts and alveoli increases. The breast becomes swollen and edematous. Symptoms that often appear when a breast milk dam occurs include swollen breasts, hot and hard breasts and the mother's body temperature up to 38 degrees Celsius. (Wulandari and Handayani, 2014)

Regarding breast milk dams can also occur due to irregular breastfeeding frequency factors, the frequency and duration of breastfeeding have a

relationship with the occurrence of breast milk dams in puerperal mothers because in the breast there are lymphatic veins that drain milk production, if the frequency and duration of breastfeeding is optimal, then breast emptying can be perfect, lymphatic venous flow smoothly, thus preventing swollen breasts or breast milk dams in the breast.

From the third to the sixth day after delivery, when normal milk is produced, the breasts become very full. It is physiological and with effective suction and removal of milk by the baby, the sense of fullness is restored quickly. But this situation can be a dam, at the dam the breast is filled very full of milk and tissue fluid. Venous and lymphatic flow is blocked, milk flow becomes obstructed and pressure on the milk ducts and alveoli increases. The dammed breasts are enlarged, swollen, and very painful. The breasts can look shiny and edema in the area of diffuse erythema. The nipples are stretched flat, the milk does not flow easily, and the baby is difficult to suck milk. Mother sometimes becomes feverish (Prawirohardjo, 2016).

Research conducted by Fithrah Nuhanifah (2013) on the effect of warm breast compresses on the smooth production of breast milk, showed that breast milk production was mostly in the category of increasing after intervention with pre-intervention results of 2.31 and post-intervention of 3.06. And in addition, the results of the T Test obtained a calculated value of -3.873 with a significant value = 0.002. T-table with free degrees 15 for $\alpha = 0.05$ gets a value of 2.131. Then the T-count is greater than that of the T-table ($3.873 > 2.131$), and besides that the significant value is less than $\alpha = 0.05$ (0.002)

Analysis of the study still exists 13.3% of mothers in RSUD Waled district of Cirebon who did not experience reduction in chest pain after a warm compression occurred because of chest pains not because of milk duct blockage but because of infection so that warm compresses do not affect pain, according to the theory on chest Pain due to an effective infection to lower the pressure is ice or cold compression. This is in line with Roesli's (2015) theory which explains that basically mothers should first know the causes of breast swelling and the principles of compresses. Typically breast feeding mothers are swollen and painful because of gland blockage due to milk production but can also be due to other things like infection. When the breasts swell due to a milk bump then warm compresses are recommended. Because warm compresses will cause the vessels in the compressed place, including the milk vessel (Mother's Milk - red) will expand. So if there is a bite then we compress warm channels that were then narrowed to expand and streamline

milk production According to the assumption of the researchers problems with the swelling of the breast due to problems in the process of breastfeeding the baby and because of the large volume of acid produced. In carrying out pain in the breasts can help reduce problems in the mother's breathing and can increase the health of the mother in the breathing.

Average Pain Scale for Breast Milk Dam After Moringa Leaf Compress in Postpartum Mothers in the Working Area of the want to Melinting Health Center in East Lampung in 2023

The average value of the pain scale against the damsel before the compression of the leaves of the valley on the mother post partum in the village of Tanjung Aji Kec. Crossing the East Lamp Year 2023 is 3.94 and the standard deviation value of 0.873 is the standard value of Error of 0.147 with the minimum value for the scale of pain of the dam 2 i.e. and the maximum value for pain scales is 5.

Milk swelling is the occurrence of swelling in the breast due to increased flow of the veins and lymph so that the milk glands are not completely empty or due to an abnormality in the putting of milk. (Winkjosastro, 2013).

Breast and nipple care is very important in the process of lactation. Both of these treatments are often a "savior" for mothers in the early stages of breastfeeding that are sometimes very difficult. For example, if there's a scratch, it's often mild. A good start is a good start. From the very beginning, it was not without the knowledge of the mother herself in caring for her breasts. So with breastfeeding, mothers who know more about breast care tend to have a greater desire to breastfeed. (Riksani, 2012 dalam Pitria, 2018).

Non-pharmacologically, by supplying compresses of Moringa oleifera leaves. Since ancient times this plant leaves are known to contain, such as tannins, steroids, triterpenoids, flavonoids, saponins, antrakuinon and alkaloids. The compound has anti-inflammatory, antibiotic, detoxifying and antibacterial properties (Aris Widiyanto, 2020).

Caterpillars (Moringa aloiifera) live mostly in sand or clay plants with a slightly acidic pH. In the plants that are often used are the leaves because of the abundance of contents and benefits in it. It grows in Indonesia and is often found in Java, Bali, Flores, Lampung and Sumatra. Plants can be used from leaves, stems, skins, seeds, flowers and roots. The plant's properties can heal antitumor, antipyretic, antiulcer, antispasmodic, antibacterial, lowering cholesterol, antioxidant, hepatoprotective, and fungicidal activity, as well as anti-diarrhea. Recent research suggests that the strawberry plant can be

used for the treatment of cardiovascular, gastrointestinal, hematologic, on hepatorenal disorders, swelling of the body, clots. Kelor leaves also have anti-aging content that can prevent premature aging due to frequent exposure to free radicals and UV rays. Kelor plants are also often used as a spice or traditional medicine that is widely used in the community especially in rural areas. One example is as smooth ashes and producing more ashes for breastfeeding mothers. Besides, the content of the leaves of the shrimp increases the hormone naturally found in the plant's leaves. (Fauzi, 2017).

Research conducted by Murtini (2022) The results showed that before treatment, the average breast swelling was a scale of 3, while after breast swelling treatment, the average scale was 1. In statistical testing using the Wilcoxon test, a p-value of 0.000 was obtained. Because ($\alpha < 0.05$) it was concluded that Moringa leaf compresses are effective for lowering the scale of breast swelling in postpartum mothers.

The compressing procedure is before compressing, it is certain that the respondent is not allergic to Moringa leaves by crushing Moringa leaves on the forearm, covering it with something to keep it attached, then the allergic reaction is waited for up to 5 minutes. Respondents were given Moringa leaf compresses by attaching crushed Moringa leaves mixed with cold water to both breasts that experienced swelling for approximately 2 hours and changed every 30 minutes done 2 times a day for 3 consecutive days. Cold compresses are compresses performed using ice water or cold water that cause vasoconstriction (Murtini, 2022).

One of the things that can cause obstacles in exclusive breastfeeding is the presence of problems with the breast. One of the problems in the breast that often occurs is breast milk dam or breast swelling. Breast milk dams are dams of milk due to narrowing of the active ducts or glands that are not emptied completely. Breast swelling often occurs on the second to tenth day postpartum. Most patients feel swollen, red, hard, painful and hot breasts. The causes of breast milk dams include ineffective frequency of breast milk secretion, this can be caused by several things, including non-hospitalization so that there is separation of mother and child, and the existence of improper and effective breastfeeding techniques (Murtini, 2022).

Susilawati Research (2021) This study aims to innovate Katuk-Ragi products as a medicine to overcome breast milk dams. This study aims to identify the bio-active content in katuk leaf extract and yeast. Based on the LCMS test results of katuk-

yeast leaf extract, compounds similar to Kaempferol-3-O-rutinoside were found in all samples. Another flavonoid compound found, Kaempferol-3-O- β -D-glucopyranoside, was only found in sample 4. Compounds from the steroid class are found in all types of formulations in katuk-yeast samples, the compound is Stigmastan-3,6-dione which is known to have anti-cancer activity. The compound Taxuspine C (C₃₄H₄₀O₉) was found in samples in formulas 5, 6, and 8. Trigonosine B (C₃₄H₃₈O₁₀) found only in formula 1 samples belongs to the diterpenoid daphnane group. In addition, coclaurine compounds were found in samples 2, 3, and 7.

According to the assumption of researchers after compressing using Moringa leaves can help in overcoming pain in the breast, because in Moringa leaves have 48 antioxidants, 18 amino acids (8 essential amino acids), 36 anti-inflammatory, multi-vitamins, and minerals. Moringa leaves contain approximately about 14% protein, 40% calcium, 23% iron, and close to all toddlers' needs for vitamin A, which can help in reducing pain and coldness in Moringa leaves.

The results of the study conducted showed a change in the decrease in the intensity of pain in the breast milk dam due to different effects in postpartum mothers. The characteristics of respondents also affect changes in the level of pain reduction such as education, age and maternal parity, in less maternal education it will cause problems in the process of maternal knowledge in pain management that occurs in respondents, while in primiparous mothers pain will last longer because it is the first time breastfeeding.

Based on research that has been done shows a difference in the decrease in pain felt in mothers after being given Moringa leaf compresses where the pain felt before experienced a difference in the level of the scale felt so that in decreasing the scale of maternal pain experienced a difference. The decline can also be influenced by several factors such as different maternal postpartum ages where the level of pain in breast swelling ranges from day 3 to 10 post partum.

Bivariate Analysis

The results before and after giving the compressed leaves of kelor to the postpartum mother in the Puskesmas Working Region Wanna Crossing East Lamp 2023 result P value 0,000 which means Ha received and Ho treated which means there is an influence of the compression of the leaf of Kelor on the pain of the axile dungeon in the Postpartum Working Territory Wanna crossing the East Lamp 2023.

Each side effect is different in each human body because of the different immunity and stability of the body, the side effects of the leaves have been thoroughly examined by several experts. One that shows the results of research proves that side effects are caused by leaves such as, hypoglycaemia and sedative effects on nursing mothers (Nurcahyati, 2014)

Treatment of breast swelling is carried out with the use of bristles for breast extension and the administration of analgesics, it is recommended to breastfeed immediately and more often, warm compresses, milk removed with a pump and performed massage (massage) as well as breast treatment. If necessary, given a temporary (2–3 days) supresilation to reduce breast swell and allow the milk to be removed by massage. This condition will generally decrease in how many days and the baby can breastfeed normally (Emilda, 2017).

The compresses use leaves that are crushed and attached to the chest that are painful and beneficial to relieve chest pain. The flavonoid compounds in the leaves of the calorie are useful as analgesics whose mechanisms inhibit the work of cyclooxygenase enzymes, thereby reducing pain, and the flavonoid also inhibits the degranulation of neutrophils, thus inhibiting the production of cytokines, free radicals, as well as the enzyme that plays a role in inflammation. (Aris Widiyanto,dkk., 2020).

Since ancient times this plant has been known to contain, like tannins, steroids, triterpenoids, flavonoids, saponins, antraquinon and alkaloids. The compound has the capacity as anti-inflammatory, antibiotic, detoxification and antibacterial (Aris Widiyanto, 2020) The compresses of leaves contain flavonoids that have a small molecular weight and moderate solubility in warm water which allows a good potential for skin penetration there is absorption (absorption) that enters through the pores then is absorbed by the epithelial tissue so that there is vasodilatation of blood vessels which causes increased blood flow of painful body parts in addition to the flavoneid content that is in the bloodstream will inhibit the work of cyclooxygenase enzymes so that the formation of prostaglandins is inhibited, thereby reducing the pain. (Murtini, 2022)

According to the Murtini study (2022) The implementation of this study uses Intrumen leaves of kelor to compress swelling of breasts and observation sheets using SPES. Variable independent what this study is the administration of compresses to the mother with the use of young and has been smoothed kelor leaves in a little water attached to both breasts with swelling for 2 hours

replaced every 30 minutes once and carried out for 3 days at once. While the dependent variable used to use the ordinal scale type is using Cekcklis SPES (Six Point Enggorgemen en Scale) which is scale 1 = soft, no change in the breasts, scale 2 = slightly hard on the Breasts, Scale 3 = hard, but breasts are not perishable, Scala 4 = hard and breasts begin to perish, 5 = Hard and perishables, Scal 6 = very hard and perishable

According to the researchers' assumptions, the impact that will be caused if the breast milk dam is not resolved, namely mastitis and breast abscess will occur. Mastitis is an inflammation or infection of the breast where the symptoms are hard, reddened, and painful breasts, can be accompanied by fever >38.0C (Ministry of Health RI, 2013) while breast abscess is a further complication after mastitis where pus accumulation occurs in the breast.

According to the researcher's assumption, a person's age will affect the addition of one's knowledge. Age is one of the factors that affect the level of knowledge. In addition to them already having physical and mental readiness, they also have a very positive level of suggestion during the puerperium. So that mothers will be more accepting of new things given additional knowledge about breast compresses using Moringa leaves and really in the application of the knowledge given. Increasing one's age will increase one's self-control ability, so that the person's attitude towards a new thing becomes more open to new things. So that the process of receiving how to apply moringa compresses to breast swelling is also easy and fast.

In this study the characteristics of respondents can affect breast milk dam pain that occurs in postpartum mothers, where the age of the mother is between 20 years or mothers who have just given birth for the first time (Primipara) the pain felt will be more intense due to the increase in more hormones, another factor is the lack of knowledge of mothers about good breastfeeding techniques so that it will cause problems with breast milk dams. While maternal education can also affect pain problems where good education will always seek information about the causes and how to overcome it so that breast milk dam pain will be easier to overcome quickly.

The results of research that have been done show a significant influence on this treatment where Moringa leaf compresses can help reduce pain in breast swelling, but if the mother does not understand how to use it properly then the decrease that occurs will be less optimal, there are some mothers who decrease or decrease difference before and after less than optimal gal is because the mother

says there is an error in the technique of breastfeeding her baby so that The problem of pain in swelling still occurs.

CONCLUSION

There is an effect of Moringa leaf compress on breast milk dam pain in postpartum mothers in the Working Area of the want to Melinting Health Center in East Lampung in 2023 with a p-value of $0.000 < 0.05$

SUGGESTION

With this research, it is hoped that the respoden will be able to apply therapy in the form of compresses with Moringa leaves in helping to reduce breast pain in the breast so as to improve the quality of breastfeeding in infants.

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