

The Effect of Breast Care on Decreasing the Scale of Breast Milk Swelling in Postpartum Mothers at Pera Clinic, Medan City

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ABSTRACT

Breast milk dams occur due to increased venous and lymph flow, causing breast milk damming and pain accompanied by an increase in body temperature. Breast care is done as an effort to reduce the dam of breast milk. This study aims to analyze the effect of breast care on decreasing the scale of breast milk engorgement. The design in this study was a quasi-experimental (one group pretest and posttest) which was conducted on 31 postpartum mothers with breast milk dams at Pera Clinic, Medan City. The results of the study obtained a p value of 0.000 ($p < 0.05$) so it can be concluded that there is a significant difference in the decrease in the scale of the swelling of the breast milk dam before and after breast care.

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1. Introduction

The puerperium (puerperium) begins after the birth of the placenta and ends when the uterine organs return to their pre-pregnancy state. The puerperium is a period of recovery of reproductive organs starting from the completion of labor until the uterine organs return to their pre-pregnancy state. The postpartum period starts from the first 2 hours of birth until 40 days, one of which is the ongoing process of milk production and lactation physiology. When breast milk production runs normally and breast milk is not released immediately, this is what causes dams (Ambarwati, 2010).

Dam Milk is swelling of the breasts due to increased venous and lymph flow, the emphasis on milk that collects in the breast glands causes breast milk dams and pain accompanied by an increase in body temperature. Breast milk dams can occur due to narrowing of the lactiferous ducts in the mother's breast, nipple abnormalities such as flat, sunken and sunken nipples or uneven milk production. (Ai Yeyeh Rukiyah & Lia Yulianti, 2014).

The increase in the incidence of breast milk dams greatly affects the postpartum period because of the inability to provide breast milk to their babies. This breast milk dam will increase if there are several things, such as the baby does not get enough milk, increased milk production, delayed breastfeeding, the relationship with the baby (bonding) is not good, and it can also be due to restrictions on breastfeeding time so that there can be inflammation in the mother's breast and breast milk palpation hard, sometimes painful and often accompanied by an increase in the mother's body temperature, and there are signs of redness and fever (Wilujeng & Hartati, 2018).

Breast milk dams occur due to several factors, including incorrect breastfeeding technique, inverted nipples, the baby cannot suck the nipple and areola, the mother does not breastfeed her baby as often as possible or the baby is not actively sucking and improper breast care. Among the factors that cause the above if not treated immediately will result in mastitis. (Nugroho, 2014).

The results of Oriza's 2019 research at the Rambung Merah Health Center, Simalungun Regency stated that the factors of breastfeeding frequency, nipple condition, breastfeeding attachment, breastfeeding position and breast care influenced the incidence of breast milk dams. (Oriza, 2019), while the results of Rosita's research in 2017 showed that of the 34 respondents who received breast care, 28 people (82.3%) did not experience breast milk dams. This can be influenced by previous experience in doing breast care during breastfeeding (Rosita, 2017). Based on the results of a preliminary survey conducted at the Pera Clinic on 8 postpartum women and the results were 4 postpartum women had experienced breast milk dams in their first delivery and 4 postpartum women did not do breast care after giving birth. This study aims to analyze the effect of breast care on breast milk dams in postpartum mothers at Pera Clinic, Medan City.

2. Method

This research was conducted at the Pera Clinic Jalan Pintu Air IV No. 77 Simalingkar B Medan City in July-September 2021. This type of research is a quasi-experimental type (one group pretest and posttest) where this study does not use a control group but does an initial test so that the magnitude of the effect or effect of breast care can be clearly identified. Respondents in this study were postpartum mothers who experienced breast milk dam as many as 31 people who were taken by purposive sampling technique. The criteria for respondents in this study were postpartum mothers who experienced breast milk dams on a scale of 2 to 6.

The instruments used in this study were the SOP checklist sheet for breast care and the SPES observation sheet. Respondents who have met the criteria will be given informed consent, then an assessment of the swelling scale of the breast milk dam will be carried out according to SPES. The respondent was then given breast care twice in the morning and evening, after which it was reassessed to see a decrease in the swelling scale. Analysis of the data used is univariate analysis and bivariate analysis to analyze the effect of breast care on decreasing the scale of breast milk dams with a simple pair t test. This research has received an ethical feasibility study from the Health Research Ethics Commission of STIKes Santa Elisabeth Medan with No. 201/KEPK-SE/PE-DT/VIII/2021.

3. Results And Discussion

1. An overview of the breast milk dam scale before and after breast care

TABLE 1.
FREQUENCY DISTRIBUTION OF BREAST MILK DAM SCALE BEFORE AND AFTER BREAST CARE

Breast Milk Dam Scale	Pre-test (n=31)		Post-test (n=31)	
	n	%	n	%
1 (Soft breasts)	0	0	12	38.7
2 (Slight changes to the breast)	6	19.4	16	51.6
3 (Breast hard but not painful)	12	38.7	2	6.5
4 (hard breasts, starting to hurt)	12	38.7	1	3.2
5 (hard and painful breasts)	1	3.2	0	0
6 (very hard and very painful breasts)	0	0	0	0

Based on table 1 shows that of the 31 postpartum mothers who experienced breast milk dams, 12 people (38.7%) had scale 4 (breasts hard and started to hurt), 12 people (38.7%) had scale 3 (breasts) hard but not painful, 6 people (19.4%) experienced breast milk engorgement on a scale of 2 (slight change in the breast) and 1 person (3.2%) experienced a scale of 5 breast milk engorgement (hard and painful breasts). The results of the post-test showed that of the 31 postpartum mothers who had been given breast care, there were 16 people (51.6%) who were on a scale of 2, there were 12 people (38.7%) who were on a scale of 1, there were 2 people (6.5%) on a scale of 3 and 1 person (3.2%) on a scale of 4. This shows that all respondents experienced a decrease in the scale of breast swelling after being given breast care.

2. Differences in Breast Milk Dam Scale before and after breast care for postpartum mothers at Pera Clinic, Medan City

TABLE 2.
ANALYSIS OF DIFFERENCES IN BREAST MILK DAM SCALE BEFORE AND AFTER BREAST CARE FOR POSTPARTUM MOTHERS AT PERA CLINIC, MEDAN CITY

Variable	Treatment	Mean ± Std. Deviation	Different mean	t	p value
Breast Milk Swelling Scale	Pre-test	3.26 ± 0.815	1.516	12,473	0.000*
	Post-test	1.74 ± 0.729			

Based on table 2, it is known that there is a significant decrease in the scale of the swelling of the breast milk dam before and after breast care with a mean difference of 1.516. The results of the statistical analysis of the paired t-test in the pre-test and post-test groups obtained p value 0.000 ($p < 0.05$) so it can be concluded that there is a significant difference related to the decrease in the scale of breast milk engorgement in postpartum mothers before and after breast care.

3. Analysis

An overview of the breast milk dam scale before and after breast care

Based on the results of the study, it showed that most postpartum mothers who experienced breast milk dams were on a scale of 4 (hard breasts and starting to hurt) as many as 12 people (38.7%) and were on a scale of 3 (hard but not painful breasts) as many as 12 people (38.7%). In this study the respondents taken were postpartum mothers on the fourth to seventh day, this is in accordance with Rukiyah's statement (2014) that breast milk dams are damming of breast milk due to narrowing of the lactiferous ducts or by glands that are not emptied completely or because of abnormalities in the nipple. This swollen breast that often occurs usually occurs after giving birth on the second to seventh day (Ai Yeyeh Rukiyah, Lia Yulianti, 2014). Symptoms of breast milk dam are breast swelling and hard palpation, sometimes painful and often accompanied by an increase in the mother's body temperature, but there are no signs of redness and fever (Prawirohardjo, 2014). Breast swelling felt by mothers with breast milk dams can be assessed using SPES (Six Point Engorgement) (Humenick, et al, 1994). The results of the post-test showed that of the 31 postpartum mothers who had been given breast care, most of them were on a scale of 2 as many as 16 people (51.6%) and all respondents experienced a decrease in the scale of breast swelling after being given breast care. In this study, the treatment given in the form of breast care was carried out 2 times in the morning and evening. according to (Prawirohardjo, 2014) stated that the management of breast milk dams is carried out by wearing a bra to support the breast and giving analgesics, it is recommended to breastfeed immediately and more often, warm compresses, milk is issued by pump and massage and breast care are carried out. This is in line with the research results (Rosita, 2017) which shows that there is a significant relationship between breast care in postpartum mothers and breast milk dams. Breast milk dams are an event that almost all postpartum mothers experience due to an increase in blood vessel flow and breast ducts and an increase in breast milk production, if this is not treated it will cause discomfort, pain and even fever in postpartum mothers. One of the care that can be done to mothers with breast milk is breast care with massage to re-launch blood flow and reduce swelling in the breasts.

Differences in Scale of Breast Milk Swelling before and after Breast Care for Postpartum Mothers at Pera Clinic, Medan City

Based on the results of the paired simple t test, it shows a significance value of 0.000 ($p < 0.05$), which means that there is a significant difference related to the decrease in the swelling scale of the breast milk dam in postpartum mothers before and after breast care. This indicates that the action of breast care has a significant effect in reducing the scale of the swelling of the breast milk dam. It can be seen from the decrease in the swelling scale of the breast milk dam in the post-test after breast care based on SPES according to Hummerik.

The results of this study are in line with research conducted by Y. Taqiyah, et al (2019) which showed that before breast

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massage was performed from 16 postpartum mothers there were 81.3% or 13 postpartum mothers who were categorized as having breast milk dams and after lactation massage there was a decrease breast milk dam to 18.8% (Taqiyah et al, 2019). This is in line with Aulya's research (2021) which showed that there was a difference in the average of breast milk dams in the group that was given breast care and not given breast care to postpartum mothers at the Ulu Talo Health Center, Bengkulu City in 2019 with a p value of 0.047. (Aulya & Supriaten, 2021). This research is supported by the theory (Wilujeng & Hartati, 2018) which states that breast care in postpartum mothers is beneficial to prevent the occurrence of breast milk dams and reduce the incidence of breast milk dams. Breast care that is carried out early and appropriately will show optimal results in an effort to prevent and treat breast milk dams non-pharmacologically.

4. CONCLUSION

The results showed that there was a significant effect on decreasing the scale of breast milk dams in postpartum mothers at Pera Clinic Medan after being given breast care. It is hoped that further researchers will conduct research with different methods, longer times or other handling techniques to overcome breast milk dams.

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