

The Effect Of Woolwich Massage On Breast Milk Production In Post Partum Mothers At The Pratama Sejahtera Clinic In 2024

Lormita Purba

Akademi Kebidanan Kharisma Husada Binjai

Email : lormitakhb@gmail.com

Abstract. Woolwich Massage is a massage performed on the lactiferous sinus exactly 1-1.5 cm above the areola mammary, with the aim of removing breast milk in the lactiferous sinus. The massage will stimulate the nerve cells in the breast. From the interview results, it was found that there were postpartum mothers who did not know about Woolwich Massage and its benefits at the Pratama Sejahtera Clinic. The research method uses the Chi-Square test. The population and sample of this research are 25 postpartum mothers who underwent Woolwich Massage at the Pratama Sejahtera Clinic using total sampling technique. The data used are primary and secondary data. Univariate and bivariate data analysis using the Chi-Square test. The results of the study indicate that there is an Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024 with a degree of significance (α) = 0.05 and $df = 1$, the calculation results are Sig. (2-tailed) $0.000 < (\alpha) = 0.05$, then H_0 is rejected and H_a is accepted. The conclusion is that there is an effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers. It is hoped that postpartum mothers can carry out Woolwich Massage more routinely to increase breast milk production.

Keywords: Woolwich Massage, Breast Milk, Post Partum.

1. INTRODUCTION

The postpartum period is the period in the first weeks after birth. The length of this period is uncertain, most consider it to be between 4 to 6 weeks, although it is a relatively uncomplicated period compared to pregnancy, postpartum is marked by many physiological changes. During this period, the changes that occur are not only physiological and sociocultural, but also psychological. Complex changes in postpartum mothers or after the delivery process require adjustment to themselves with lifestyle and conditions after the process (Sarwono, 2018). Some of these changes may only slightly disturb "new mothers" although serious complications can also occur (Yuliana, Wahida, 2020).

The postpartum period is also a recovery period, starting from the end of labor until the reproductive organs return to their pre-pregnancy state. The duration of the postpartum period is 6-8. Providing health education on postpartum and breastfeeding health care, nutritional needs, birth spacing planning, breastfeeding, and breastfeeding (Yuliana, Wahida, 2020).

According to Ummar, breast milk is the best source of nutrition for babies that has many benefits for development, growth, and health. Cleanliness of breastfeeding is inseparable from the role in breastfeeding. Good knowledge, support from health workers in carrying out early breastfeeding initiatives (Christin Jayanti 2022).

Early Breastfeeding (IMD) can help mothers provide exclusive breastfeeding for 6 months and breastfeed for up to 2 years. Breast milk is also the best food for babies in early life, not because breast milk contains enough nutrients but also breast milk contains antibodies that protect babies from infection. Breastfeeding is very important for optimal growth and development, both physically and mentally, and the baby's intelligence. Therefore, breastfeeding needs to get attention from mothers and health workers so that the breastfeeding process can be carried out properly. (Christin Jayanti 2022).

Lactation or breastfeeding has two meanings, namely the production and release of breast milk. The hormones that play a role in the lactation process consist of prolactin and oxytocin. Prolactin stimulates the release of breast milk and oxytocin stimulates the release of breast milk. Oxytocin also stimulates uterine contractions so that it returns to its pre-pregnancy state (Yeni Aryani 2021).

When the breasts are producing breast milk, there is a process of releasing breast milk, namely when the baby starts sucking. In this process, there are several different hormones that work together to release milk and release it to be sucked. The baby's sucking movement can stimulate nerve fibers in the nipple. These nerve fibers carry the request for milk through the spinal column to the pituitary gland in the brain. The pituitary gland will respond to the brain to release the hormones prolactin and oxytocin. The hormone prolactin stimulates the breasts to produce more milk. While the hormone oxytocin stimulates the very small muscles that surround the ducts in the breast, these contractions compress the ducts and release milk into the reservoir under the areola. (Wulan Wijaya 2023).

According to the latest WHO data in 2015 in the United States, the percentage of breastfeeding women who experienced breast milk dams reached an average of 87.05% or 8242 postpartum mothers out of 12,765 people. (Ika Oktaviani 2022).

Based on a survey conducted in Indonesia, it is estimated that 876,665 women were diagnosed with blocked milk ducts accompanied by mastitis, reaching 90.05%, and the incidence in North Sumatra ranged from 40%-60% of women diagnosed with mastitis because mothers did not know about the symptoms, causes, and how to deal with blocked milk ducts (Ika Oktaviani 2022).

Based on the results of a survey conducted in the city of Medan (Ika Oktaviani, 2022), around 40-60% of mothers do not breastfeed their babies, this shows that postpartum mothers' knowledge about breast milk dams, especially giving breast milk to their babies, is still low and the achievement in 2018 was 20.33%.

Problems that occur during breastfeeding include blocked milk ducts that cause pain, fever, red breasts that can be felt with lumps that are painful or swollen and hardened breasts, this can affect the process of giving breast milk which is called breast milk dams which can be handled with Breastcare or Woolwich Massage. Woolwich Massage is a massage performed on the lactiferous sinus exactly 1-1.5 cm above the areola mammae, with the aim of removing breast milk in the lactiferous sinus. The massage will stimulate nerve cells in the breast. The stimulation will be forwarded to the hypothalamus and responded to by the anterior pituitary to release the hormone prolactin which will be circulated in the blood to the breast myoepithelial cells to produce breast milk which aims to increase the prolactin reflex and oxytocin reflex (let down reflex), prevent blockage, increase breast milk production and prevent inflammation or dams in the breast. Woolwich Massage is also best done on postpartum primara mothers twice a day in the morning and evening for 3 days postpartum by doing a circular massage using both thumbs on the lactiferous sinus area exactly 1-1.5 cm outside the areola mammae for 15 minutes. (Kusumastuti, 2018).

Researchers found that postpartum mothers who were given a combination of Woolwich massage intervention had a 5.146 times greater chance of producing breast milk less than 12 hours postpartum. The combination of the Woolwich massage method given to postpartum mothers twice a day in the morning and evening for 3 days postpartum is likely to increase breast milk production and reproduction (Usman, 2019). Based on the results of a study conducted by Endah Tri Wahyuni and Ratri Noviyanti at PMB Istri Utami in 2019 on 25 normal postpartum mothers after the seventh day of Woolwich Massage, it showed that there were benefits of giving Woolwich Massage to postpartum mothers, there was an increase in secretion and the amount of breast milk released after being given woolwich therapy (ETWahyuni & Noviyanti, 2019).

Based on the results of an initial survey at one of the tandem clinics on July 2, 2024 at the Pratama Sejahtera Clinic by interviewing midwives and 2 postpartum mothers on the first day and the tenth day. From the results of the interview, it was found that midwives and postpartum mothers did not know about woolwich massage and its benefits,

midwives had also never performed and provided woolwich massage care to postpartum mothers. From the results of interviews with postpartum mothers, it was found that both postpartum mothers experienced low breast milk production, so that this problem caused failure in providing exclusive breastfeeding.

Based on the background data above, the researcher is interested in conducting research with the title "The Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024".

2. LITERATURE REVIEW

Physiological changes in postpartum mothers that occur in the urinary system are caused by the muscles that work on the bladder and urethra being pressed by the front part of the fetus during labor. In addition, the mother will also experience diuresis in the first 24 hours, this is due to the influence of increased estrogen hormone during pregnancy which is retentive and will be excreted again with urine in the postpartum period (Pillitteri, 2020; Lowdermik, Perry, Bobak, 2020). Physiological changes that occur in the reproductive system include changes in the cervix and uterus. Changes that occur in the cervix are after the placenta is born the cervix is gapped like a funnel, soft, after two hours postpartum the cervix can be passed by 2-3 fingers and after seven hours can only be passed by one finger.

Thus, if labor experiences placental retention problems and is known early on, manual cleaning of the uterus can be carried out using the placenta. Meanwhile, the changes that occur in the uterus are the process of uterine involution, namely the return of the uterus to its original state as before pregnancy which begins after the placenta is born (Pillitteri, 2019; Lowdermik, Perry, Bobak, 2019). Physiological changes in the endocrine system are a sudden and large decrease in progesterone and estrogen hormone levels which replace the inhibitory effect of progesterone on alactalbumin production by the rough endoplasmic reticulum. The increase in a-lactalbumin functions to stimulate lactose synthesis and ultimately increase the amount of lactose in breast milk (Cunningham, 2021).

3. METHODS

This study uses a Chi-square research design with a quantitative approach using statistical tests with a p value of 0.05 (Aries Chandra, 2022). This type of research is observed only once and risk factors and impacts are measured according to any condition

when conducting observations. The purpose of the study was to determine the Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024. The location of the study was carried out at the Pratama Sejahtera Clinic for the 2024 Period, because after the researcher conducted observations, the population was sufficient and the distance from the place to the researcher was affordable. In this study, the researcher's time needed to collect data and conduct research started from July to December 2024.

4. RESULTS

A. Research result

Based on the research results from "The Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024" With a sample size of 25 Postpartum Mothers, the analysis used was univariate and bivariate.

B. Univariate Analysis

Univariate analysis aims to explain and describe the characteristics of each variable studied. With univariate analysis, the distribution of Woolwich Massage on Breast Milk Production in Postpartum Mothers can be seen.

Table 1 Frequency Distribution of Woolwich Massage Technique in Postpartum Mothers at Pratama Sejahtera Clinic in 2024

| No | Variables | | Amount | |
|--------------|------------------|-----------|--------|------|
| | | | f | % |
| 1 | Woolwich Massage | Irregular | 8 | 32 |
| | | Regular | 17 | 68 |
| Total | | | 25 | 100% |

Based on Table 1, it can be seen that the frequency distribution of Woolwich massage at the Pratama Sejahtera clinic in 2024, the majority of those who do Woolwich massage regularly are 17 respondents (68%) and the minority who do Woolwich massage irregularly are 8 respondents (68%).

Table 2 Distribution of Frequency of Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024

| No | Variables | | Amount | |
|--------------|------------------------|------------|--------|------|
| | | | f | % |
| 1 | Breast milk production | Not smooth | 8 | 32 |
| | | Fluent | 17 | 68 |
| Total | | | 25 | 100% |

Based on Table 2, it can be seen that the distribution of the frequency of breast milk expenditure at the Pratama Sejahtera clinic in 2024, the majority of breast milk

expenditure was smooth, amounting to 17 respondents (68%) and the minority of breast milk expenditure was not smooth, amounting to 8 respondents (32%).

C. Bivariate Analysis

Table 3 Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024.

| NO | Woolwich Massage | Breast milk secretion | | | | Amount | | Df | Sig 2-tailed |
|--------------|------------------|-----------------------|-----|------------|-----|--------|------------|----|--------------|
| | | Fluent | | Not smooth | | f | % | | |
| | | f | % | f | % | | | | |
| 1 | Regular | 17 | 100 | 0 | 0 | 17 | 100 | 1 | 0,000 |
| 2 | Irregular | 0 | 0 | 8 | 100 | 8 | 32 | | |
| Total | | 17 | 100 | 8 | 100 | 25 | 100 | | |

Based on Table 3, it is known that the majority of those who regularly perform Woolwich massage experience smooth breast milk production, as many as 17 respondents (100%), and the majority of those who do Woolwich massage irregularly experience irregular breast milk production, as many as 8 respondents (100%).

Based on the results of the Chi-Square test of the Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024 with a degree of significance (α) = 0.05 and $df = 1$, the calculation results were obtained, namely Sig. (2-tailed) 0.000 $<(\alpha) = 0.05$, then H_0 is rejected and H_a is accepted. The conclusion is that there is an Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024.

5. DISCUSSION

A. Univariate Analysis of Woolwich Massage

Based on Table 1, it can be seen that the frequency distribution of woolwich massage at the Pratama Sejahtera clinic in 2024. The majority who do woolwich massage regularly is 68% and the minority who do woolwich massage irregularly is 32%. In table 1 above, it can be analyzed that the Pratama Sejahtera Clinic has provided good information to postpartum mothers so that mothers understand about Woolwich Massage and even want to do Woolwich massage with enthusiasm.

Woolwich Massage stimulates nerve cells in the breast, forwarded to the hypothalamus and responded to by the anterior pituitary to release the hormone prolactin, which will be distributed by the blood to the breast myoepithelial cells to

produce breast milk. The results of Pmuji's (2018) study found that the combination of the Woolwich Massage and endorphine massage methods had an effect on increasing prolactin hormone levels and breast milk volume in postpartum mothers. The massage was carried out in the morning for 15 minutes for three days, from the first to the third day postpartum.

The results of this study are in line with (Badrus, 2018) which states that one of the efforts that can be made to stimulate the hormones prolactin and oxytocin in postpartum mothers by providing a relaxed sensation to the mother is by doing woolwich massage. In addition, the results of his study stated that there was an increase in breast milk production after being given the Woolwich Massage intervention (Badrus, 2018).

B. Breast milk secretion

Based on Table 2, it can be seen that the distribution of the frequency of breast milk expenditure at the Pratama Sejahtera clinic in 2024, smooth breast milk expenditure was 68% and irregular breast milk expenditure was 32%. In Table 4.2, it can be analyzed that the Pratama Sejahtera Clinic applies the Woolwich Massage technique to postpartum mothers well so that there is smooth breast milk expenditure in mothers.

Breast milk is the best food for babies in early life, not because breast milk contains enough nutrients but also breast milk contains antibodies that protect babies from infection. Breast milk is very important for optimal growth and development both physically and mentally and the intelligence of the baby. Therefore, breastfeeding needs to get attention from mothers and health workers to carry out breast care so that the breastfeeding process can be carried out properly. (Christin Jayanti. 2022).

Mothers who do not do breast care do not produce breast milk smoothly, while mothers who do breast care produce breast milk smoothly. This is in line with Pramitasari and Saryono, (2018) who stated that breast care movements are useful for facilitating the reflex of breast milk production. In addition, it is also an effective way to increase breast milk volume. Last but not least, it prevents breast congestion.

C. Bivariate Analysis

Based on the results of the Chi-Square test of the Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024 with a degree of significance (α) = 0.05 and $df = 1$, the calculation results were

obtained, namely Sig. (2-tailed) $0.000 < (\alpha) = 0.05$, then H_0 is rejected and H_a is accepted. The conclusion is that there is an Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024.

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The results of postpartum breast milk production were obtained after, the majority of breast milk production was smooth with 17 respondents (68.0%) and breast milk production was not smooth as many as 8 respondents (32.2%). Pamuji (2018) stated that one of the efforts that can be done to stimulate the hormones prolactin and oxytocin in mothers after giving birth is to provide a relaxed sensation to the mother, namely by doing a woolwich massage which will stimulate nerve cells in the breast, forwarded to the hypothalamus and responded to by the anterior pituitary to release the hormone prolactin, which will be distributed by the blood to the breast myoepithelial cells to produce breast milk. The results of Pamuji's study (2014) found that the combination of the Woolwich massage method and endorphine had an effect on increasing prolactin hormone levels and breast milk volume in postpartum mothers. The massage was carried out in the morning for ± 15 minutes for three days, from the first to the third day postpartum.

The results of this study are in line with (Badrus, 2018) which states that one of the efforts that can be made to stimulate the hormones prolactin and oxytocin in postpartum mothers to provide a relaxed sensation to the mother is by performing a woolwich massage. In addition, the results of his research stated that there was an increase in breast milk production after being given a woolwich massage intervention (Badrus, 2018).

Postpartum mothers who breastfeed, the level of prolactin hormone will increase along with the decrease in estrogen and progesterone levels and the stimulation of the baby's sucking on the mother's nipples. The level of prolactin hormone in postpartum mothers will return to normal 3 months after giving birth until the child is weaned and at that time there will be no baby sucking, but the release of milk continues (Soetjningsih, 2019).

Based on the researcher's observation, the effect of woolwich massage given to postpartum mothers is one of the very significant factors in increasing breast milk production. Therefore, when woolwich massage intervention is carried out routinely by postpartum mothers, mothers do not need to worry about breast milk production and the adequacy of nutrition received by the baby, because the breast milk produced will automatically be abundant.

Woolwich massage therapy is one of the factors that increase breast milk production, in addition to the importance of paying attention to factors during pregnancy, pregnant women are advised to always actively carry out regular antenatal checks and make efforts to prevent anemia and infection during pregnancy, pregnant women must be able to manage stress during pregnancy and breastfeeding, Stressful life events during pregnancy will negatively affect the mother and baby including the initiation of breastfeeding. Postpartum mothers are advised to provide breast milk to their babies because it is proven that the content of breast milk already represents several sources of nutrition (Rafhani, 2019).

6. CONCLUSION

After conducting research on The effect of Woolwich Massage on breast milk production in postpartum mothers at the Pratama Sejahtera Clinic in 2024, then it can be concluded as follows:

- 1) From the research results, it was found that the majority of those who do Woolwich massage regularly are 68% and the minority Postpartum Mothers at the Pratama Sejahtera Clinic in 2024 32% of those who do Woolwich massage irregularly.
- 2) From the research results, it can be seen that based on the distribution of the frequency of breast milk expenditure at the Pratama Sejahtera clinic in 2024, smooth breast milk expenditure was 68% and irregular breast milk expenditure was 32%.
- 3) From the results of the study, it can be concluded that the results of the Chi-Square test of the Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024 with a degree of significance (α) = 0.05 and $df = 1$ obtained the calculation results, namely Sig. (2-tailed) 0.000 $< (\alpha) = 0.05$, then H_0 is rejected and H_a is accepted. The conclusion is that there is an Effect of Woolwich Massage on Breast Milk Production in Postpartum Mothers at the Pratama Sejahtera Clinic in 2024.

7. SUGGESTION

A. For Respondents

Expected pregnant women at the Prosperous Primary Clinic in 2024 can know the benefits about Woolwich Massage on Breast Milk Production in Postpartum Mothers

B. For Clinic

It is hoped that the leadership and all employees at the Kasih Bunda Primary Clinic can use this research as an effort to increase mothers' interest in carrying out Woolwich Massage for Postpartum Mothers at Pratama Sejahtera Clinic

C. For Educational Institutions

It is expected to be reading material and a reference source for lecturers and other students who will conduct further research, thus making it easier to create Scientific Papers and other assignments.

D. For Researchers

It is hoped that it can increase the author's insight, knowledge and experience in applying science and become an opportunity for researchers to be able to apply research methods that have been created during education.

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