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THE EFFECT OF WOOLWICH MASSAGE ON BREAST MILK PRODUCTION IN POSTPARTUM MOTHERS (CASE STUDY)

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Abstract

According to WHO data from 2018, the percentage of breastfeeding women experiencing engorgement averages 87.06%, or 8,242 cases. The 2015 Indonesia Demographic and Health Survey states that there were 35,985, or 15.60%, postpartum mothers who experienced engorgement, and in 2016, the number rose to 77,231, or 37.12%. Meanwhile, according to the Indonesian Ministry of Health Research and Development Agency in 2018, the incidence of engorgement in Indonesia was highest among working mothers, accounting for 6% of breastfeeding mothers. The aim of the research is to provide Midwifery Care for Mrs. D P2A0 on the 3rd day postpartum with the issue of breast milk engorgement in the KIA Room of the UPTD Puskesmas Pahandut in Palangka Raya City. The type of research used is descriptive qualitative with a case study approach. The design employs field observational methods. The method of data collection is through interviews and documentation analysis of midwifery care. Data analysis is obtained from the results of observations and descriptive analysis of midwifery care, assessments, formulating diagnoses, planning, implementing, and evaluating midwifery care. The results of the research after observation on the fourth day postpartum showed that breast milk had started to come out, the breasts still appeared swollen, and the pain had begun to decrease. On the fifth day, there was no swelling in the right breast, and milk was coming out from both breasts. By the seventh day, the flow of breast milk was smoother, the baby was breastfeeding vigorously, and was alternately nursed on both breasts.

Keywords: *Woolwich massage, Breast milk production, Postpartum mothers*

1. INTRODUCTION

The ASI dam occurs due to the narrowing of the milk ducts in the mother's breast and also happens when the mother experiences nipple abnormalities such as flat, inverted, or concave nipples. Such incidents occur because the mother does not breastfeed or the milk is not expressed, leading to blockages that can manifest various symptoms such as engorgement, including swelling, hot and hard breasts, pain upon pressure, redness, and the mother's body temperature reaching 38°C [1]. According to WHO data from 2018, the percentage of breastfeeding women experiencing breast engorgement averages 87.06%, or 8,242 cases. The 2015 Indonesia Demographic and Health Survey states that there were 35,985 or 15.60% of postpartum mothers who experienced breast engorgement, and in 2016, the number rose to 77,231 or 37.12%. Meanwhile, according to the Indonesian Ministry of

Health Research and Development Agency in 2018, the incidence of breast engorgement in Indonesia was highest among working mothers, accounting for 6% of breastfeeding mothers.

The ASI dam, if not addressed promptly, will become a breast problem that is a warning sign during the postpartum period. Mothers who experience difficulties in breastfeeding will affect the exclusive breastfeeding given to their babies. The phenomenon of the ASI dam can hinder the breastfeeding process, leading to a less close relationship between mother and child. The health profile data of Indonesia in 2021 shows that the percentage of exclusive breastfeeding for infants aged 0-5 months was 71.58% in 2021. This figure indicates an improvement from the previous year, which was 69.62%. However, most provinces still have a percentage of exclusive breastfeeding below the national average. Based on data from the Central Statistics Agency in 2022, the exclusive breastfeeding rate in Central Kalimantan Province is 55.26%, which is lower than the 2021 figure of 55.98%. Meanwhile, the exclusive breastfeeding achievement in Palangka Raya City in 2020 was 45.82%, a figure that is still far from the target exclusive breastfeeding rate for Palangka Raya City, which is 80%.

There are many causes of the failure to provide exclusive breastfeeding, one of which is the lack of confidence among mothers that their breast milk can meet their baby's nutritional needs. A common issue faced by postpartum mothers is the low amount of breast milk produced, and it is not uncommon for mothers to complain that their milk does not come in, leading them to resort to formula feeding for their babies. The impact on babies who are not given breast milk is that they are more susceptible to diseases, which can hinder their growth and cognitive development due to the lack of immune-boosting substances and the nutritious, high-quality food that breast milk provides [2].

In the case of breast milk production, immediate action is needed to facilitate the production of breast milk. There are many things that can be done to increase breast milk production in mothers after childbirth, with the aim of stimulating the production of the hormone’s oxytocin and prolactin. An example of a technique that can be applied to facilitate breast milk production is stimulation through the use of Woolwich massage. Woolwich massage is applied to the area of the lactiferous sinus about 1-1.5 cm above the mammary areola, aimed at secreting breast milk present in the lactiferous sinus. Woolwich massage will stimulate the nerve cells in the breast, which is then relayed to the hypothalamus and received by the anterior pituitary to produce prolactin hormone. This hormone functions to direct blood flow to the myoepithelial cells to produce and increase the volume of breast milk, as well as to prevent blockages in the breast that could lead to swelling [3].

2. METHODOLOGY

This research is a descriptive qualitative study using a case study approach. Meanwhile, the design employs field observation. Data collection methods were carried out through interviews and analysis of midwifery documentation. Data analysis was obtained from a case study research by creating a narrative from the results of observations and descriptions of midwifery care, assessments, formulating midwifery diagnoses, planning, implementing, and evaluating midwifery care. The research and analysis of this case study were conducted in May 2023 at the KIA Room of the UPTD Puskesmas Pahandut in Palangka Raya.

3. RESULTS

The postpartum period (puerperium) begins after the placenta is delivered and ends when the reproductive organs return to their pre-pregnancy state. The postpartum period lasts for approximately 6 weeks. Women who go through this puerperium period are referred to as puerperal. The puerperium (postpartum) lasts for 6 weeks or 42 days, which is the time

required for the reproductive organs to recover to a normal condition [4]. At the beginning of the postpartum period, when the baby does not breastfeed well, and if the glands are not emptied properly, it will lead to a buildup of breast milk. The signs of milk stasis include a warm, hard, and painful feeling in the breasts. Flat nipples can also make it difficult for babies to breastfeed. Sometimes the flow of breast milk can be obstructed by the narrowing of the lactiferous ducts due to the enlargement of veins and lymphatic vessels [5] One of the common issues that often occurs in postpartum mothers after giving birth is milk engorgement, which happens due to the narrowing of the lactiferous ducts, or when the glands are not emptied properly, or due to abnormalities in the nipples.

In providing midwifery care, an assessment is conducted through subjective and objective data to obtain accurate, precise, and complete information. After that, diagnoses and midwifery problems are formulated according to the client's condition, allowing for the planning and implementation of midwifery care tailored to the case. Evaluation is conducted after providing midwifery care to determine the effectiveness of the care given, in accordance with the Minister of Health Decree No. HK.01.07-/Menkes 320 of 2020 regarding Midwifery Care Standards. The results of the observation conducted on July 6, 2023, regarding Mrs. D, aged 23, P2 A0, in the normal postpartum period on day 3, indicated that she gave birth to her second baby 3 days ago at the Puskesmas Pahandut in Palangka Raya City. The delivery was normal, and there were no perineal tears. On the third day, breast milk started to come in, but it was still little; the milk only came from the left breast, and the baby has only been breastfed from the left breast since the first day of birth. The reason the mother only breastfeeds the baby from one side is due to her experience with her first child, who vomited after being fed from the right breast. As a result, the mother is reluctant to breastfeed her second baby from the right side. One of the mother's breasts, specifically the right one, appears swollen and feels painful when pressed.

Based on subjective and objective data on Mrs. D, a 23-year-old woman, P2 A0, on the third day postpartum, it was found that the mother is experiencing milk engorgement in one part of her breast, specifically the right breast. This is marked by swelling in the right breast and pain when pressed. According to the theory that states that milk engorgement occurs due to the obstruction of breast milk caused by the narrowing of the milk ducts or by glands not being emptied completely, or due to abnormalities in the nipple. Milk engorgement is the swelling of the breast due to increased venous and lymphatic flow, leading to milk stasis and pain accompanied by a rise in body temperature. The occurrence of milk engorgement is caused by the inadequate flow of breast milk, as the baby does not nurse frequently enough. This issue worsens when the mother does not breastfeed her baby, resulting in the baby not receiving exclusive breastfeeding, and if not properly addressed, it can lead to milk engorgement [6] Swollen breasts or milk engorgement often occurs on the third or fourth day after a mother gives birth. Stasis in blood vessels and lymph will result in increased intraductal pressure, which will affect various segments of the breast, leading to an overall increase in pressure. As a result, the breasts often feel full, tense, and painful. This was followed by a decrease in breast milk production. Similarly, dirty nipples can cause blockages in the ducts [7].

Management actions that can be taken for Mrs. D, a 23-year-old woman in the third day of normal postpartum with the issue of breast engorgement, include advising her to try complementary alternatives such as Woolwich massage. Woolwich massage is a breast massage performed on the lactiferous sinus area, 1 to 1.5 cm above the nipple areola, aimed at facilitating the release of breast milk from the lactiferous sinus. Massage is performed by stimulating the nerve cells in the breasts, which is then transmitted to the hypothalamus and

anterior pituitary, prompting a response that leads to the release of prolactin hormone. This hormone is then directed to the myoepithelial cells in the breasts, allowing for milk production, increasing milk volume, and preventing the occurrence of milk stasis [8]. According to another theory, the benefits of Woolwich massage include: preventing blockages, preventing inflammation or breast engorgement, and increasing breast milk production. Woolwich massage is given to postpartum mothers twice a day, in the morning and evening, for a minimum of three days. The procedure involves circular massage using both thumbs on the lactiferous sinus area, specifically 1-1.5 cm outside the areola, for 15 minutes [2].

According to the research conducted), it is stated that there is a difference in breast milk production before and after Woolwich massage, indicating a significant effect of Woolwich massage on breast milk production in breastfeeding mothers [8]The Woolwich massage technique is effective in facilitating breast milk production in postpartum mothers. The increase in breast milk production can be caused by the process of milk formation that occurs after there is touch or stimulation from the massage performed [9]. According to another study, Woolwich massage is performed for about 15 minutes each session and is done twice a day until the seventh day [10]. As many as 80% of mothers who regularly perform Woolwich massage at home report that their breast milk supply has increased, indicated by their breasts feeling full and heavy every two hours, along with a continuous increase in the baby's weight [11].

The next management step is to advise the mother to perform regular breast care. Breast care is performed for various indications, including inverted nipples or breast engorgement. The goal is to facilitate the flow of breast milk during the breastfeeding period. For postpartum care, it should be done as early as possible, within 1 to 2 days, and performed twice a day. Breast care is performed through methods such as compressing, massaging the breasts, and eventually emptying the breast milk [6]. If the breasts are swollen due to milk engorgement, do the following: compress the breasts with a warm, damp cloth for 5 minutes, massage the breasts from the base towards the nipple, express some milk from the front of the breast to soften the nipple, breastfeed the baby every 2-3 hours, and if the baby cannot suck the remaining milk, express it by hand. Place a cold cloth on the breasts after breastfeeding [12].

The next management step is to explain the correct breastfeeding techniques to the mother. Breastfeeding with improper techniques can lead to sore nipples and suboptimal milk flow, which can affect subsequent milk production or cause the baby to be reluctant to breastfeed [12]. After observation on the following day, which was the fourth day post-delivery, it was found that breast milk had started to come out from the right breast, the breast still appeared swollen, and the pain had begun to decrease. On the fifth day, there was no swelling in the right breast and milk was coming out from both breasts. By the seventh day, the milk flow was smoother, the baby was breastfeeding vigorously, and was alternately nursed on both breasts.

4. CONCLUSIONS

Based on the assessment of subjective and objective data on Mrs. D, 23 years old, P2 A0, in the third day postpartum with the issue of breast milk engorgement. Milk engorgement is the swelling of the breasts due to increased venous and lymphatic flow, leading to a buildup of breast milk and accompanied by pain and a rise in body temperature. The occurrence of milk engorgement is caused by the inadequate flow of milk, as the baby does not nurse frequently enough. The issue of the ASI dam can be addressed with a complementary alternative, namely performing Woolwich massage. Woolwich massage is a breast massage

performed on the lactiferous sinus area, 1 to 1.5 cm above the nipple areola, aimed at facilitating the release of breast milk from the lactiferous sinus. Routine breast care and proper breastfeeding techniques need to be observed and practiced by mothers to support smooth breast milk production and prevent engorgement.

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