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THE EFFECT OF OXYTOCIN MASSAGE ON THE SMOOTHNESS OF BREAST MILK PRODUCTION IN POSTPARTUM MOTHERS

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ABSTRACT
The smoothness of breast milk production is a key factor in achieving exclusive breastfeeding in Indonesia. Unfortunately, some mothers experience insufficient milk supply. This is often due to a lack of stimulation of the hormones oxytocin and prolactin, which play crucial roles in breast milk production. As a result, alternative interventions such as oxytocin massage are necessary. Objective to determine the effect of oxytocin massage on the smooth production of breast milk in postpartum mothers Mrs. N at PMB Tutik Purwani. This research employed an observational case study methodology. Primary data was collected from Mrs. N, who received oxytocin massage at PMB Tutik Purwani. The results indicated a significant difference in breast milk production before and after the oxytocin massage intervention. Babies of the participants experienced a weight gain of 300 grams. Oxytocin massage has a positive impact on breast milk production in postpartum mothers, leading to increased weight gain in their infants.

Keywords: oxytocin massage; postpartum; smoothness of milk production

INTRODUCTION
The postpartum period is the period during labor and immediately after birth which includes the following weeks when the reproductive organs return to their normal non-fertile state. Puerperium is a period that begins after the birth of the placenta and ends when the uterus returns to its original state before pregnancy, which lasts for 40 days, the changes that occur are in the postpartum mother, covering all body systems, one of which is an increase in breast milk production (Noviana, 2018).Breast milk (breast milk) is the best food for newborns and is the only healthy food that babies need in the early days of life. However, not all mothers can give exclusive breastfeeding to their babies. Exclusive Breast Milk is breast milk given to babies from the beginning of birth for 6 months without adding or replacing it with other foods and drinks, except for drugs, minerals, vitamins (Ministry of Health, 2018).Breast milk is a type of food that meets all elements of the baby's needs both physically, psychologically, socially and spiritually. Breast milk contains nutrients, hormones, growth immunity elements, anti-allergies, and inflammatory properties. Nutrients in breast milk include nearly 200 nutritional elements (Hubertin, Delima Mera, et al. 2016).

The benefits of breast milk for babies are that they help start their lives well, contain antibodies, form antibodies, contain nutrients with the right composition, reduce the incidence of cases of drntism, give the baby a sense of security and comfort, there is a bond between mother and baby, avoid allergies, increase intelligence and help jaw development and stimulate tooth growth (Kristiyansari, Sutanto, Andina V, 2018). The smooth production of breast milk is influenced by several factors such as the frequency of breastfeeding, the weight of the baby at birth, the gestational age when the baby is born, maternal age and parity, stress and acute diseases, early initiation of breastfeeding (IMD), smoking, alcohol consumption, breast care, contraceptive use and nutritional status. In addition to some of the factors above, the hormone oxytocin also affects

breast milk production. One way to stimulate the hormone oxytocin is to do an oxytocin massage (Devita Ayu, 2019).Oxytocin massage is an act of massaging the spine from the nerves to 5-6 scapula which will accelerate the work of the parasympathetic nerve to convey commands to the back of the brain as oxytocin exits. This oxytocin massage is done to stimulate the oxytocin reflex or let down reflex. Another benefit of oxcitocin massage is to accelerate the healing of placental implantation wounds, prevent postpartum bleeding, can accelerate the occurrence of uterine infiltration, increase breast milk production and increase comfort in breastfeeding mothers (Cahyaningsih, 2018).The massage that is carried out usually uses lotion, talc powder, soap, or essential oils that function to reduce friction due to massage, do not damage the skin, and make it easier to massage. It is also possible to replace the use of lotion with essential oils such as amyris, avocado, jasmine, rosemary, and lavender (Nurhanifah, 2020).

METHOD

This research method uses a This research employed an observational case study methodology. The data used in this study used primary data. This research was carried out at PMB Tutik Purwani on Mrs. N who was given oxytocin massage.The complementary midwifery care provided is adjusted to the problems faced by the mother during the mentoring time. In this study, it was found that postpartum mothers experienced anxiety and breast milk had not come out after childbirth, so complementary therapy was given in the form of oxytocin massage. This massage is carried out to facilitate the production of breast milk felt in postpartum mothers. This is done so that Mrs. N feels calm and relaxed in breastfeeding her baby.

RESULT AND DISCUSSION

Table 1.
Complaints Of Postpartum Mothers

Visit	Complaints
6 hours postpartum	The breast milk has not come out and the mother feels anxious

In table 1 about complaints of postpartum mothers, it can be concluded that after giving birth, Mrs. N experienced complaints that her breast milk had not come out and the mother felt anxious.

Table 2.
Complementary Midwifery Care

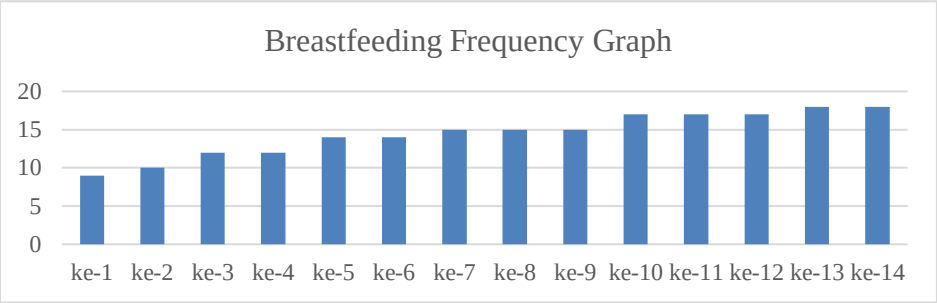
Excursions	Care Provided	Result
6 hours pp	Oxytocin massage	Breastfeeding is not smooth
14 days pp	Oxytocin massage	Breast milk comes out smoothly

In table 2 about complementary midwifery care, it can be concluded that the care provided is oxytocin massage.

Table 3.
Baby Weight

Visit	Baby Weight
6 hours	3.400 grams
14 days	3.400 grams
19 days	3.700 grams

In table 3 about baby weight, it can be concluded that the baby's weight has increased by 300 grams.



In graph 4 about breastfeeding frequency, it can be concluded that there is an increase in reastfeeding frequency.

Based on table 1 about postpartum complaints, it can be concluded that after giving birth to her baby, Mrs. N experienced complaints that her breast milk had not come out. Poor milk production on the first day after giving birth can be caused by a lack of stimulation of the hormone oxytocin and the psychological state of the mother which plays a very important role in facilitating breast milk production. This is in accordance with research conducted by Nurul Isnaini and Rama Diyanti who said that breast milk production in the first days after giving birth can be caused by a lack of stimulation of the hormones oxytocin and prolactin which play a very important role in the smooth production of breast milk, thus causing breast milk not to come out immediately after giving birth, the baby has difficulty sucking, the state of the mother's nipples that are not prominent (Isnaini & Diyanti, 2015). In an effort to produce breast milk, there are two things that affect production, namely production and expenditure. Breast milk production will be affected by the hormone prolacttın while breast milk production will be affected by the hormone oxytocin (Mulyani, 2021). According to Ratna Sari Hardiani (2017) The production and smoothness of breast milk is greatly influenced by psychological factors because the mother's feelings can inhibit or increase oxytocin production, if the mother is in a state of depression, sadness, lack of confidence and various forms of emotional tension can reduce breast milk production so that breast milk does not flow smoothly (Hardiani, 2017), Sufficient rest because mothers who have just given birth do not get enough rest. Incorrect breastfeeding techniques can cause the mother to feel pain when the baby starts breastfeeding. This can affect breast milk production, because mothers who feel pain and fear can inhibit the production of the hormone oxytocin (Karuniawati et al., 2012).

The position of the mother can also affect the smooth discharge of breast milk, this is supported by Irnawati's research which said that a lot of less breast milk is directly related to the position of breastfeeding mothers. The right position will encourage maximum milk output. There are various good breastfeeding positions, namely sitting, standing, lying down and football positions (Irnawati, 2017). Based on Table 2 regarding the complementary care provided, which is oxytocin massage. According to Karuniawati, Fauziandari, and Wulandari (2012) the oxytocin massage is aimed at dealing with the irregularity of milk production. Oxytocine massage is performed on the spine (vertebrae) to the bone costae fifth-sixth to stimulate the production of oxytosin hormone. Whereas according to Nurainun & Susilowati, (2021) oxytocine massage aims to provide relaxation and comfort, increasing the hormone oxitosin to lighten milk. There are several factors that can influence the release of oxytocin, including the mother's thoughts, feelings, and emotions. The secretion of oxytocin can be hindered or increased by the mother's feelings. The hormone oxytocin causes the muscle cells surrounding the milk ducts to contract, pushing the breast milk out of the

milk production ducts and flowing ready for the baby to suckle. If a mother has strong thoughts, feelings, and emotions, it is likely to suppress the oxytocin reflex, which inhibits and reduces breast milk production. The body parts that are massaged are the nape, shoulders, and back. After the oxytocin treatment, Mrs. N felt relaxed and comfortable, and her family members will perform oxytocin massage at home. During the visit on day 19, Mrs. N's breast milk was flowing well, and there was an increase in her baby's weight from 3,400 grams to 3,700 grams.

Based on Table 3, it was found that breast milk production in mothers was smooth, as evidenced by the increase in the baby's weight. The baby's weight at birth was 3,400 grams, and at 14 days old, the baby's weight remained the same at 3,400 grams, while at 19 days old, it increased to 3,700 grams. Oxytocin massage is beneficial for enhancing the smooth production of breast milk. With sufficient levels of the hormone oxytocin, the myoepithelial cells of the mammary glands contract more effectively, resulting in increased and smoother breast milk production. (Litasari et al., 2018). The hormone oxytocin is the love hormone, or the hormone of affection, whose production is influenced by the mother's thoughts, both positive and negative. The provision of oxytocin massage can enhance comfort in breastfeeding mothers. The condition of a mother experiencing discomfort will be hindered by the let-down reflex, which can reduce breast milk production. (Sandriani et al., 2023).Oxytocin massage is a massage performed along the spine (spine) to the sixth fifth costae bone and is an effort to increase the production of the hormones prolactin and oxytocin after the delivery process which aims to increase breast milk production (Rahayu & Yunarsih, 2018). Infant weight gain as one of the indicators of maternal breast milk production is sufficient so that babies do not experience weight loss > 10% of the body weight is born. Physiologically, newborns will experience a weight loss of no more than 10% of their birth weight.

Based on graph 4 about breastfeeding frequency, there is an increase in the frequency of breastfeeding every day. According to Sulistiyah (2016), a good breastfeeding frequency is 10-12 times per day or at least 8 times per day and 10 to 20 minutes for each breast. The breastfeeding interval is one and a half hours or once every 2 hours. Poor breast milk production is one of the factors that cause failure in breastfeeding. Meanwhile, internal factors that affect production include physical condition, psychological, maternal knowledge and physical factors of the baby, while external factors include early initiation of breastfeeding and frequency of breastfeeding. One way to increase breast milk is by breastfeeding the baby as often and regularly as possible (Angriani, 2018). According to Simbolon (2017), if the baby sucks the breast, it will stimulate the hormone prolactin which regulates the cells in the alveoli to produce milk. Baby suction will also stimulate the production of another hormone called the hormone oxytocin which will make the muscle cells around the alveoli contract so that milk will be pushed towards the nipple so that the more often the baby sucks, the more milk is released.This study shows that there is an effect of giving oxytocin massage to facilitate the production of breast milk for postpartum mothers, milk production is very determined by the principle of supply and demand, meaning that the more often the breast is emptied and sucked by the baby, the more milk production will increase (Rohan, 2017).

CONCLUSION

Based on the results of the study that can be taken from the data, oxytocin massage plays a role in facilitating the discharge of breast milk for Mrs. N's postpartum mother at PMB Tutik Purwani so that mothers feel calmer because they can breastfeed their babies and mothers become more

relaxed. Oxytocin massage has an effect on the smooth production of breast milk in postpartum mothers and baby weight gain. The next case study is expected to provide complementary midwifery care according to the needs of mothers and babies during the mentoring period, so that researchers can further evaluate in more detail the effect of complementary midwifery care provided.

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