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Application of Oxytocin Massage in Continuity of Care

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ABSTRACT

Exclusive breastfeeding plays an important role in the growth and development of the baby. Milk production can be increased through oxytocin massage. Oxytocin massage is a massage along the spine, which functions to increase oxytocin. The study aimed to determine the results of the application of oxytocin massage on the smooth production of breast milk. This type of research is qualitative with a case study research method using *the Continuity Of Care* midwifery care approach which is carried out continuously from pregnancy to the postpartum period. This oxytocin massage is done during the first 5 days postpartum, where in 1 day 1 massage is done in the afternoon for 10-15 minutes. Oxytocin massage evaluation was carried out on the 6th day. The result of the study showed that after the oxytocin massage, the mother felt calmer and more relaxed, and the milk production increased as evidenced by the increase in the baby's weight for 6 days. Oxytocin massage has been proven to facilitate breast milkproduction as seen from the baby's weight gain of 300 grams.

I. Introduction

The infant mortality and illness rate in Indonesia is still a big problem. According to the WHO (in Utami, 2021) It said that every year about 3% (3.6 million) of the 120 million newborns develop neonatal jaundice and nearly 1 million of these babies later die. One of the causes of neonatorum jaundice is the lack of exclusive breast milk. Exclusive breastfeeding coverage in Indonesia in 2023 is 63.9 % (Ministry of Health of the Republic of Indonesia, 2024).

Exclusive breastfeeding plays an important role in the growth and development of newborns. However, often after giving birth, mothers experience discomfort throughout the body, stress and worry that they cannot meet their baby's milk needs. So that it can inhibit the secretion of the hormone oxytocin which plays an important role in breast milk production. Breast milk production is influenced by two factors, namely milk production and milk production. Milk production is affected by the hormone prolactin while milk production is affected by the hormone oxytocin. The hormone oxytocin will be released through stimulation to the nipple through the baby's mouth sucking or through oxytocin massage.

Oxytocin massage is one of the non-pharmacological complementary therapies that aims to facilitate breast milk production in postpartum mothers. This massage is performed along the spine (*vertebra*) to the fifth or sixth costal bone and is an attempt to stimulate the hormones prolactin and oxytocin after childbirth. The oxytocin massage that is done will provide comfort to the mother so that it will provide comfort to the breastfed baby as well. Physiologically, this will increase the work of the parasympathetic nerve to send commands to the back of the brain so that the hormone oxytocin is released and flows into the blood then enters the mother's breast causing the muscles around the alveoli to contract and make breast milk flow more easily

(Krismiyati et al., 2018).

This theory is strengthened by the theory expressed by Sungkar et al (2023) who say that oxytocin massage performed by the husband in the morning and evening for 15 minutes is more effective in stimulating the parasympathetic nerves which can produce a sense of relaxation from the posterior pituitary and produce endorphins from the anterior pituitary. So that postpartum mothers feel more relaxed during breastfeeding.

II. Methods

This type of research is qualitative with a case study research method using an obstetric care approach *Continuity Of Care* (COC). *Continuity Of Care* is continuous midwifery care for pregnant women, childbirth, postpartum patients, newborns and family planning (Aprianti, Harpa, Nur, Sulfi, & Maharani, 2023). The research was conducted at Midwifery clinic Kuswatiningsih on Mrs. E who was given continuous care starting from the third trimester of pregnancy to the postpartum period.

Complementary care is provided according to the problems faced by the mother during mentoring. At the beginning of the postpartum period, the mother said that breastfeeding was not smooth, so the researcher provided complementary care, namely oxytocin massage. During the 6-hour postpartum period, the mother is immediately given an oxytocin massage which aims to make the mother more relaxed so that it can stimulate breast milk production. The oxytocin massage given by the researcher aims to stimulate the production of the hormone oxytocin so that breast milk production becomes smooth. Smooth milk production will prevent the occurrence of neonatal jaundice and the baby's weight loss >10% of birth weight.

When the oxytocin massage was carried out in 6 hours postpartum, the researcher also educated and taught oxytocin massage techniques to Mrs. E. education to the husband is expected to be able to perform and apply the oxytocin massage at home. The researcher contracted with Mrs. E's husband to perform oxytocin massage at home every day.

Oxytocin massage is performed during the first 5 days postpartum in a row. On the second to fifth days, it is done once a day in the afternoon by Mrs. E's husband with a duration of massage of 10-15 minutes. Then on the sixth day, an evaluation of oxytocin massage was carried out at PMB Kuswatiningsih with the results that there was an effect of oxytocin massage on the production of postpartum breast milk as seen from the increase in infant weight. Baby's weight increased from a birth weight of 2700 grams to 3000 grams

III. Results and Discussion

Result

The results before and after oxytocin massage in 6 hours postpartum on March 28, 2024 at 19.10 WIB were seen from the mother's complaints.

Table 1 Complaints of Postpartum Mothers

Before	After
Mother said her breast milk was not smooth	Mothers say they feel relaxed and milk production increases

Based on table 1, it can be concluded that after oxytocin massage was performed on postpartum mothers, the mother felt more relaxed and increased milk production.

The results of oxytocin massage as seen from the baby's skin color.
Table 2 Breast milk production seen from the Baby's Skin Color

Date	Skin Tone
28/3/2024	Redness, not icteric
3/4/2024	Redness, not icteric

Based on table 2, it can be concluded that oxytocin massage has been given since 6 hours postpartum and the results are obtained that the baby's skin color is normal, not icteric.

The results of oxytocin massage are seen from the increase in the baby's weight.
Table 3 Breast Milk Production as seen from Infant Weight Gain

Date	Weight
28/3/2024	2700 grams
3/4/2024	3000 grams

Based on table 3, it can be concluded that oxytocin massage has been given since 6 hours postpartum and the results are obtained that there is an increase in the baby's weight on day 6 as one of the indicators that the baby is getting enough breast milk.

Discussion

Based on table 1, oxytocin massage is given at postpartum 6 hours Postpartum adjusted to the complaints felt by the mother. The mother said that the breast milk had not come out smoothly. The oxytocin massage given aims to stimulate the hormone oxytocin in the mother's body. After being given oxytocin massage, the mother felt relaxed and milk production increased. Oxytocin massage has been shown to have an effect on relaxation. This massage works by stimulating the production of the hormone oxytocin, known as the hormone "love" or "happiness". This hormone helps reduce cortisol levels or stress hormones, so that the mother feels calmer and more relaxed. With reduced stress, mothers can focus more and enjoy the breastfeeding process without feeling anxious or depressed. In addition, the relaxation obtained from oxytocin massage also helps improve the quality of the mother's sleep, which is essential for overall postpartum recovery and well-being.

This is in line with the theory put forward by Squirting (2023) that oxytocin massage effectively stimulates the parasympathetic nerves which can produce a sense of relaxation from the posterior pituitary and produce endorphins from the anterior pituitary. Oxytocin massage makes postpartum mothers feel more relaxed and comfortable during breastfeeding, which causes breast milk production to also increase. Another function of oxytocin massage is to reduce breast swelling, reduce breast blockage and help milk production when the mother or baby is sick. The benefits of oxytocin massage also provide comfort to the mother, reduce swelling and maintain the production of postpartum breast milk. In addition, oxytocin massage can also relax tension and relieve stress in postpartum mothers (Scott, 2019).

Based on table 2, the results were obtained that the baby's skin color did not experience Icteric. Icteric is a yellowish color of the skin, sclera and mucosa caused by the accumulation of unconjugated bilirubin in serum (Felicia, 2021). Clinically, icteric first appears on the baby's face and eyes and then spreads to other parts of the body as bilirubin levels in the serum

increase. Physiological icteric conditions do not require special treatment but need close supervision so that they do not become pathological icterus.

Icteric can be caused by several factors, namely short erythrocyte lifespan, liver immaturity so that bilirubin transport and conjugation \ are not smooth, impaired meconium production, absence of bacteria that break down bilirubin into urobilinogen and lack of nutrition or breast milk in babies. The reddish skin color of the baby in table 2 indicates that the baby is not suffering from nutritional deficiencies or breast milk. So it can be concluded that the mother's milk production is sufficient.

Based on table 3, data is obtained that breast milk production in mothers is smooth as evidenced by the increase in the baby's weight. The baby's weight after birth is 2700 grams and at the 6-day visit it increases to 3000 grams. At the age of a week, a newborn will normally experience a weight loss of no more than 10% of birth weight. Such weight loss is caused by changes in the composition of body fluids and adaptation to extra-uterine life (Felicia, 2021).

Baby E's weight has not decreased and shows an increase indicating that the fulfillment of nutrition or milk production is sufficient. The Oxytocin massage given stimulates the Oxytocin Hormone. The hormone oxytocin produced triggers *let-down refleks*, which is a reflex that helps breast milk flow from the mammary glands to the putting, thus emitting a greater amount of milk (Titik et al.,2022). Oxytocin massage is very beneficial for mothers who have difficulty in milk production or babies who have difficulty getting enough breast milk. With increased milk production and flow, babies can receive enough nutrients, which contribute to the baby's growth and development (Mustikawati, 2022).

Smooth breast milk will make the baby gain weight so that the baby does not lose weight >10% of birth weight. Exclusive breastfeeding is needed for 6 months and gives breast milk until the child is 2 years old (Nisa, 2023). Oxytocin massage is one of the solutions to overcome breast milk instability. Massage done along the spine (*vertebra*) to the fifth or sixth costal bone and is an attempt to stimulate the hormones prolactin and oxytocin after childbirth (Krismiyati et al., 2018).

IV. Conclusion

Based on the results of the research taken from the data, oxytocin massage was able to play a role in smoothing the milk production of postpartum mothers at PMB Kuswatiningsih, as evidenced by the increase in the baby's weight in the first 6 days. The next case study is expected to provide complementary midwifery care according to the needs of the mother during the mentoring period.

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