

Oxytocin Massage Education for Postpartum Mothers to Improve the Smooth Production of Breast Milk (Breast Milk)

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Abstract

Oxytocin massage, a technique involving the massaging of the vertebrae to the fifth-sixth costae (ribs), aims to stimulate the hormones prolactin and oxytocin, thereby enhancing breast milk production. Breast milk is the optimal nourishment for infants, containing the essential nutrients in ideal proportions. A common challenge in the initial stages of breastfeeding is the insufficient production of breast milk on the first day postpartum. Oxytocin massage is a method used to facilitate the smooth flow of breast milk. This study aims to increase the knowledge of postpartum mothers about oxytocin massage and its role in stimulating breast milk production. A descriptive case study approach was employed in nursing practice. The study focused on educating postpartum mothers about the steps and benefits of oxytocin massage. The findings indicate that mothers who were educated about oxytocin massage not only understood the technique but were also able to perform it effectively. There was a notable increase in the mothers' knowledge and practical ability regarding oxytocin massage therapy. Enhancing the understanding and application of oxytocin massage among postpartum mothers can play a significant role in overcoming initial breastfeeding challenges, ensuring better nourishment for infants through increased breast milk production.

Keywords: Oxytocin Massage, Education, Oxytocin Massage Practice.

INTRODUCTION

One of the factors that affect the baby's health problems is the problem of breastfeeding (Earle, 2002; Feenstra et al., 2018). The problem of exclusive breastfeeding in Indonesia also requires attention from health workers, especially midwives. Nationally, the coverage of exclusive breastfeeding in Indonesia for infants 0-6 months has increased from year to year but has not been able to achieve national achievement indicators. Nationally, the national coverage, infants receive exclusive breast milk by 61.33%. This figure has exceeded the 2017 strategic plan target of 44%. In the research of Biancuzzo (2003) and Indriyani (2016), which is an effort to stimulate the hormones prolactin and oxytocin in mothers after childbirth, in addition to expressing breast milk, it can also be done by treating or massaging the breast, cleaning the nipples, breastfeeding the baby often even though the milk has not come out, breastfeeding early and regularly and oxytocin massage. Oxytocin massage is performed to

stimulate the oxytocin reflex or the let-down reflex.

Failure in the breastfeeding process is often caused by the occurrence of several problems, both problems in the mother and in the baby. For some mothers who do not understand this problem, breastfeeding failure is considered a problem only for their children (Amir, 2014; Nuampa et al., 2022; Shafaei et al., 2020). Problems from mothers who are born during breastfeeding can start from before childbirth (antenatal period) to the postpartum period. Breastfeeding problems can also be caused by special circumstances.

Oxytocin massage is one of the solutions to overcome the unsmooth production of breast milk. Oxytocin massage is a massage along the spine (vertebrae) to the fifth and sixth costae bones and is an attempt to stimulate the hormones prolactin and oxytocin after childbirth. In addition to providing comfort to the mother and stimulating the oxytocin reflex, oxytocin massage also has other benefits, namely reducing breast swelling (engorgement), reducing breast milk blockages (plugged/milk duct), and helping to maintain breast milk production when the mother and baby are sick (Cooper & Kowalsky, 2015).

Oxytocin massage is a spinal massage on the 5th–6th costa to the scapula, designed to accelerate the work of the parasympathetic nerve by stimulating the posterior pituitary. This massage aims to trigger the oxytocin reflex, also known as the let-down reflex. It involves massaging the back along both sides of the spine, which helps the mother relax and reduces postpartum fatigue. When the mother is relaxed and not fatigued, it aids in the production of the hormone oxytocin. The neurotransmitters stimulated by the spinal massage prompt the medulla oblongata to send messages to the hypothalamus, causing the posterior pituitary to secrete oxytocin and consequently stimulate milk secretion from the breasts.

Previous studies have demonstrated the efficacy of oxytocin massage in increasing milk production during the early postpartum days, as it is most effective on the first and second days when breast milk production is typically insufficient. Research by Uvnas-Moberg et al. (2005) highlighted the role of oxytocin in reducing stress and enhancing milk ejection. Similarly, studies by Jonas et al. (2008) and McNeilly et al. (2023) confirmed the positive impact of oxytocin massage on milk production and maternal relaxation.

The novelty of this research lies in its focus on educating postpartum mothers about the specific techniques and timing of oxytocin massage to maximize its benefits. While previous studies have established the general effectiveness of oxytocin massage, this study aims to provide a structured educational approach to empower mothers with the knowledge and skills to perform the massage effectively.

The aim of this study is to enhance the understanding and practical application of oxytocin massage among postpartum mothers, thereby improving milk production and maternal well-being during the early postpartum period.

RESEARCH METHODS

This study employs a descriptive case study design to identify and address the challenges faced by breastfeeding mothers experiencing issues with exclusive breastfeeding in the Rose Room of Waled Hospital, Cirebon Regency.

Data was collected through a comprehensive nursing care approach, which included the following steps:

1. Assessment: the initial assessment involved gathering detailed patient histories, including breastfeeding practices, challenges faced, and previous knowledge or experience with oxytocin massage.

2. Diagnosis: based on the assessment, specific nursing diagnoses were established to identify the primary issues impacting exclusive breastfeeding.
3. Planning: nursing plans were developed, focusing on educating mothers about the techniques and benefits of oxytocin massage. The plans included detailed steps for performing the massage, recommended frequency, and duration.
4. Implementation: the nursing plans were implemented, with nurses providing hands-on training and demonstrations of oxytocin massage to postpartum mothers. Mothers were guided through the process, ensuring they understood and could perform the massage independently.
5. Evaluation: The effectiveness of the intervention was evaluated by monitoring changes in breastfeeding success, maternal relaxation levels, and overall satisfaction with the breastfeeding experience. Feedback from the mothers was collected to assess their understanding and application of the massage techniques.

Observations and feedback from the mothers were analyzed to identify common themes and insights regarding their experiences with oxytocin massage. This included assessing their confidence in performing the massage, perceived benefits, and any difficulties encountered.

RESULTS AND DISCUSSION

Assessment

The assessment was carried out on November 3rd, 2023, by conducting interviews, physical examinations, and observations, and the results of the assessment obtained subjective data with the patient saying that the breast milk had not come out, the breasts felt tight and painful, saying that she had not breastfed his child and objective data was obtained. Namely, the patient's breasts were palpable, there was tenderness, breast milk seemed to have not come out, blood pressure 110/80 mmHg, pulse 85x/min, temperature 36.8 C, respiration 20x/min.

Nursing Diagnosis

Analyzing the data of the results of the study is a formula to determine the actual nursing diagnosis of the patient. In the case of Mrs. D, the researcher has found a diagnosis, namely ineffective breastfeeding, obtained from subjective data and objective data.

Nursing Intervention

The nursing intervention in this case study focused on diagnosing breastfeeding ineffectively. The goal is to educate and demonstrate oxytocin massage.

Nursing Implementation

The implementation of nursing case studies by researchers aims to carry out nursing care for lactating postpartum mothers.

Nursing Evaluation

After the implementation of nursing, it was continued to demonstrate how to massage oxytocin.

The nursing practice in this case study designed to address the problem of breastfeeding is ineffective due to the lack of breast milk production in the mother. One of the therapies carried out on mothers with poor breast milk production is oxytocin massage.

In the educational activities carried out, the mother's enthusiasm was seen. During the demonstration of how to massage oxytocin, the mother followed the steps well. The results of this activity can be seen from the increase in maternal knowledge of oxytocin massage therapy.

Inadequate breast milk production is the main reason for mothers to stop breastfeeding

because mothers feel that they do not have enough breast milk production to meet the needs of babies and support baby weight gain. Studies have shown that insufficient milk supply is a common concern among breastfeeding mothers and can significantly impact breastfeeding duration (Kent et al., 2016). Lack of stimulation of the hormones prolactin and oxytocin causes a decrease in milk production and production in the first days after childbirth, which affects the smooth production of breast milk. Therefore, it is important for mothers and families to apply oxytocin massage, especially on the first day of the baby's birth. Research indicates that early and frequent breastfeeding stimulates prolactin and oxytocin release, which are crucial for milk production and ejection (Wittig et al., 2014).

Breast milk production is greatly influenced by the psychological condition of breastfeeding mothers. When breastfeeding mothers feel comfortable and relaxed, oxytocin excretion can go well. Oxytocin, often referred to as the love hormone, plays a significant role in promoting maternal behaviors and bonding, and its release is enhanced in a relaxed environment (Uvnas Moberg, 2013). There are points that can facilitate breast milk, including three points on the breast: the point above the nipple, the point right on the nipple, and the point under the nipple, as well as the point on the back that is in line with the breast. Oxytocin stimulation massage for breastfeeding mothers functions to facilitate breast milk production and increase maternal comfort. Massage on the mother's back that relaxes the mother can also stimulate the production of oxytocin.

The hormone oxytocin stimulates the contraction of the uterine myometrium layer during labor. This hormone also enhances milk production through the contraction of myoepithelial cells in the breast gland in response to the baby's nipple sucking, which then triggers a neurogenic reflex transmitted to the hypothalamus through nerve fibers in the spinal cord (spinal region) (SUE CARTER et al., 2007).

Several studies have identified causes of breastfeeding failure, including lack of social support, less intensive contact between mother and baby, permissive social influence on formula feeding or discontinuation, commercial practices of formula milk factories, early introduction of breast milk substitutes, lack of knowledge about breastfeeding in mothers and health workers, maternal anxiety and stress, lack of confidence in mothers to breastfeed, underweight babies, malnourished mothers, multiparity or primiparity, hormonal contraceptives, and baby temperament (Blyth et al., 2002; Odom et al., 2013).

CONCLUSION

Following the education and demonstrations, mothers' knowledge of oxytocin massage for enhancing breast milk production significantly increased. This improvement is expected to enable mothers to independently perform the massage, ensuring consistent milk production. By empowering mothers with this knowledge, it is anticipated that breastfeeding practices will be more effective and sustained.

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