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Midwifery Care for Postpartum Mothers with Breast Milk Problems

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Abstract:
Failure of exclusive breastfeeding is caused by poor milk production, which can be influenced by stress, lack of understanding, and the mother's physiological condition. Inadequate milk production can negatively affect the growth and development of the baby. Non-pharmacological interventions such as oxytocin massage effectively stimulate oxytocin and prolactin hormones that play an important role in breast milk production. The purpose of this study was to provide postpartum midwifery care with the problem of breast milk not flowing through oxytocin massage therapy. This research used a case study approach to Mrs. FHP's complaint of breast milk not flowing in the right breast. Data were collected through interviews, observations, physical examinations, and documentation studies. The intervention was carried out by teaching the client's husband to use oxytocin massages, and monitoring was carried out for 7 days. Evaluation results showed increased breast milk production after oxytocin massage was performed twice a day for 15 minutes. Oxytocin massage is proven to be effective as a non-pharmacological intervention in overcoming the problem of poor milk production in postpartum women. Appropriate midwifery care can help mothers achieve exclusive breastfeeding success.

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INTRODUCTION

Breastfeeding is a critical component of maternal and infant health, yet challenges such as insufficient milk production remain a significant barrier to achieving exclusive breastfeeding (Tomori, 2022; Safira & Luthfiyana, 2024). Poor lactogenesis, often linked to maternal stress during the postpartum period, disrupts the delicate hormonal balance required for successful milk synthesis. Stress delays the onset of lactogenesis by inhibiting the release of prolactin and oxytocin, essential hormones driving milk production and ejection (Nagel et al., 2022). This disruption is particularly impactful in the first two weeks postpartum, a critical window for establishing breastfeeding. Understanding the interplay between psychological stress and physiological mechanisms is vital for developing targeted interventions to support postpartum mothers (Henshaw, 2023).

The Hypothalamic-Pituitary-Adrenal (HPA) axis mediates the physiological stress response, elevating cortisol levels to mobilize energy and enhance survival responses (Mbiydzenyuy & Qulu, 2024). While acute stress-induced cortisol release is adaptive, chronic or excessive activation of the HPA axis suppresses prolactin and oxytocin secretion, directly impairing lactation. This hormonal imbalance manifests as elevated heart rate, blood pressure, and blood glucose levels, further compounding maternal distress and reducing breastfeeding efficacy (Josefson & Skibiel, 2023). Addressing stress-induced lactation insufficiency requires a multifaceted approach that mitigates psychological and physiological stressors (Wijenayake et al., 2023).

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Pharmacological interventions, such as galactagogues and domperidone, are commonly employed to stimulate milk production (McBride et al., 2023). However, these treatments carry notable risks. Galactagogues may induce maternal anxiety, insomnia, severe depression, and seizures, while infants exposed to these agents via breast milk often experience gastrointestinal discomfort (Balkam, 2022). Domperidone, though effective in some cases, is associated with maternal side effects, including dry mouth, headaches, palpitations, and fatigue, alongside potential long-term risks such as weight gain and breast engorgement. These adverse effects underscore the need for safer, non-pharmacological alternatives to enhance lactation (Anadón et al., 2021).

Non-pharmacological therapies offer promising avenues for managing lactation insufficiency with minimal side effects. Techniques such as acupuncture, guided imagery, the Marmet method, and oxytocin massage have demonstrated efficacy in clinical settings (Tantri et al., 2025; Kim & Han, 2024). Oxytocin massage leverages tactile stimulation to activate afferent nerve pathways, enhancing oxytocin and prolactin secretion (Takahashi, 2021; Sari et al., 2023). This dual hormonal boost improves milk production and exerts anti-stress effects by reducing cortisol levels. Gentle skin-to-skin contact during massage further reinforces the neurohormonal cascade, fostering maternal relaxation and lactation success (Tarsha & Narvaez, 2023).

Emerging evidence highlights oxytocin massage as a physiologically harmonious intervention for postpartum women (Ujung & Hutabarat, 2024). This technique safely amplifies endogenous oxytocin release by mimicking natural sensory stimuli, promoting milk ejection reflexes, and reducing stress biomarkers. Its accessibility and low-risk profile make it an ideal adjunct to conventional lactation support strategies. Moreover, integrating such non-invasive therapies aligns with the growing emphasis on holistic, patient-centered care in midwifery practice (Istighosah & Sari, 2021; Wahyuningsih et al., 2022).

Midwifery care is pivotal in addressing postpartum lactation challenges through evidence-based, compassionate interventions. This care model is rooted in midwifery science and encompasses health promotion, problem identification, and therapeutic decision-making across the perinatal continuum. Midwives are uniquely positioned to implement non-pharmacological strategies like oxytocin massage while monitoring maternal-infant outcomes. Their holistic approach bridges psychosocial and physiological needs, ensuring comprehensive support for breastfeeding mothers experiencing milk production difficulties (Ochala, 2023; Putri et al., 2025).

This case study explores the application of midwifery care in managing postpartum breast milk insufficiency, emphasizing the integration of pharmacological and non-pharmacological therapies. By examining the efficacy of oxytocin massage and other stress-reduction techniques, the study aims to inform clinical practice and policy, advancing global efforts to improve breastfeeding outcomes. The findings underscore the importance of tailoring lactation support to individual maternal needs, prioritizing safety, and empowering women through skill-based, empathetic care.

STUDY DESIGN

This study employed a case study design to investigate midwifery interventions for addressing breast milk insufficiency in a postpartum mother, Mrs. FHP, who reported impaired milk flow in her right breast. Data were collected through semi-structured interviews, direct observations, physical examinations, and medical documentation reviews to assess lactation challenges, maternal stress levels, and physiological factors. The primary focus was on identifying barriers to effective breastfeeding, including anatomical issues, stress-related hormonal disruptions, and maternal perceptions of milk production. Ethical clearance was obtained from the Health Polytechnic of

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Malang, Ministry of Health, Indonesia, ensuring adherence to research standards and participant confidentiality.

The intervention centered on implementing oxytocin massage therapy, delivered through training provided to Mrs. FHP's husband to enhance social support and promote consistent application. The husband was taught standardized techniques for gentle tactile stimulation of the breasts, abdomen, and back to activate neurohormonal pathways linked to oxytocin release. Daily monitoring over seven days tracked changes in milk flow, maternal stress indicators, and infant feeding patterns. Quantitative measures, such as milk volume expressed and maternal self-reported stress scores, were recorded alongside qualitative feedback on the intervention's feasibility and acceptability. This approach evaluated the practicality of integrating partner-assisted massage into routine postpartum care.

The study prioritized ethical rigor, including informed consent from Mrs. FHP and her family, ensuring voluntary participation and the right to withdraw at any stage. Confidentiality was maintained by anonymizing participant data and restricting access to research team members. Limitations included the single-case design, which limits generalizability, and potential biases due to self-reported outcomes. However, the methodology provided actionable insights into non-pharmacological lactation support, emphasizing the role of midwifery-led interventions in addressing postpartum breastfeeding challenges through collaborative, family-centered care.

PATIENT INFORMATION

Based on the client's assessment of obstetric problems, which can be confirmed in this case, breast milk is not flowing smoothly. The researcher will describe the study's results based on the stages of the assessment and examination process carried out on the client.

CLINICAL FINDINGS

Based on the results of the assessment on 11 February 2025, subjective data was obtained: The mother said she had just given birth to her first child 6 days ago, with complaints that the right breast felt swollen and the milk coming out had decreased in the last 2 days. The objective data obtained the following results: the general condition is good, consciousness is maintained, vital signs examination results obtained blood pressure 110/70 mmHg, pulse 82 times/minute, breathing 18 times/minute, and temperature 36.8°C. On breast examination, the results of the right and left soft breasts were obtained, but the right breast looked swollen. When checked, the milk did not come out, while the left breast was normal; breast milk came out on abdominal examination. The height of the uterine fundus was palpated two fingers below the center, and uterine contractions were stiff. Based on the data analysis, the midwifery diagnosis of G1P001 Postpartum on day 6, with the problem of breast milk production, is not smooth.

THERAPEUTIC INTERVENTION

Midwifery interventions on the problem of inadequate breast milk production were carried out by inviting the mother to understand the importance of exclusive breastfeeding, observing the condition of the mother's breasts, providing education on proper breastfeeding techniques and comfortable breastfeeding positions, encouraging the mother to breastfeed frequently or express milk to stimulate production, teaching the mother and family to do oxytocin massage and providing psychological support to the mother so as not to stress because stress can inhibit breast milk

production, advising the mother to eat nutritious foods and enough fluids, and facilitating lactation counseling if needed.

At the second meeting evaluation on 18 February 2025, the subjective data assessment resolved the problem; the mother said the breasts were no longer swollen, and the milk production was smooth. In addition, it is also reinforced by objective data that an examination of the mother's breasts is carried out, and the results obtained are that the right and left breasts have no swelling, and when the milk is checked, the milk that comes out drips a lot. The client carries out all interventions that the researcher has taught.

Based on basic data collection, including subjective data and objective data, a midwifery diagnosis was obtained for Mrs. FHP, aged 24 years, P1001, Postpartum day 6, with the problem of breast milk not flowing. This data was obtained from the assessment results on 11 February 2025, with the results of subjective data that the mother experienced swelling of the right breast and reduced milk production 2 days ago. Objective data on breast examination obtained the results of soft breasts on the right and left, but the right breast looked slightly swollen, and when checked, the milk did not come out, while the left breast was normal, and breast milk came out.

Midwifery diagnoses proposed by researchers in Mrs. FHP, 24 years old, P1001 postpartum day 6, with the problem of breast milk not flowing, obtained through assessment and by theory. The interventions arranged are inviting to understand the importance of exclusive breastfeeding, observing the condition of the mother's breasts, providing education on proper breastfeeding techniques and comfortable breastfeeding positions, encouraging mothers to breastfeed frequently or express milk to stimulate production, teaching mothers and families to do oxytocin massage and provide psychological support to mothers so as not to stress because stress can inhibit milk production, advise mothers to eat nutritious foods and enough fluids and facilitate lactation counseling if needed.

The planned intervention was to perform oxytocin massage twice a day for 15 minutes. In the researcher's opinion, the implementation from the first day to the evaluation on the seventh day went according to the intervention plan. This was characterized by a gradual increase in breastmilk production until, at the end of the first week, the breastmilk production of Mrs. FHP became smooth. Mrs. FHP's milk production became smooth. This shows that the intervention effectively overcame breastfeeding problems during the postpartum period.

Table 1. Summary Results of Midwifery Care (Mrs. FHP, age 24 years)

Aspect	Noted
Subjective data	- Mrs. FHP said she gave birth 6 days ago. - She complained that the right breast was swollen - Right breast milk production has decreased in the last 2 days
Objective data	- Good general condition - Consciousness components - Blood Pressure 110/70 mmHg - Pulse 82x/min, - Respiration 18x/min, - Temperature 36.8°C - The right breast is slightly swollen, with no milk coming out; the left breast is normal, with milk coming out. - TFU 2 finger below center, uterine contractions hard
Obstetric diagnosis	P1001 day 6 postpartum with the problem of breastmilk production is not smooth
Interventions	- Educate on the importance of exclusive breastfeeding

Aspect	Noted
	- Observation of breast condition - Educate on proper breastfeeding techniques and comfortable breastfeeding positions - Encourage frequent breastfeeding or expressing breastmilk - Education and practice of oxytocin massage by husband - Psychological support to prevent stress - Encourage the consumption of nutritious food and adequate fluids - Facilitate lactation counseling if needed
Intervention duration	7 days (11-18 February 2025)
Oxytocin massage frequency	2 times a day, each for 15 minutes
Final evaluation	Mother said breasts were no longer swollen
Conclusion	Breast milk production was smooth and abundant when checked

DISCUSSION

Based on the researcher's data that has been found in FHP mothers with diagnosis P1001 postpartum day 6 with the problem of breast milk is not smooth by performing midwifery interventions by inviting to understand the importance of exclusive breastfeeding, observing the condition of the mother's breasts, providing education about correct breastfeeding techniques and comfortable breastfeeding positions, encouraging mothers to breastfeed or express milk to stimulate production frequently, teaching oxytocin massage to the client's husband and telling him to do oxytocin massage 2 times a day for 15 minutes and providing psychological support to the mother so as not to stress because stress can inhibit milk production, advising the mother to consume nutritious food and enough fluids, and facilitating lactation counseling if needed has been successfully carried out (Kartilah & Februanti, 2023).

Teaching oxytocin massage can increase one's understanding of helping to accelerate breast milk production postpartum. Oxytocin massages performed periodically and routinely in postpartum mothers can increase breast milk stimulus and production, whereas oxytocin massages are performed twice daily for 15 minutes. Oxytocin massage is a method to increase breast milk production without using drugs that can stimulate the let-down reflex stimulated by sensory stimulation of the afferent system, which can be done by massaging the spinal area. The massage is done at the seventh cervical section to the costal area 5-6. Stimulation in this area can accelerate the work of parasympathetic nerves to send commands to the hypothalamus to produce the hormone oxytocin to stimulate milk production (Noviandry et al., 2023).

Oxytocin massage has the benefit of providing a sense of comfort to the mother, which, in turn, stimulates the process of releasing the hormone oxytocin. Oxytocin massage can also increase milk production and the smoothness of breast milk release. Non-smooth milk let-down is caused by several factors, such as fear, anxiety, and stress, that can inhibit the let-down reflex. Oxytocin massage has the benefit of providing a sense of comfort to the mother, which, in turn, stimulates the process of releasing the hormone oxytocin. This oxytocin massage can also increase milk production and the smoothness of breast milk release. Breast milk production is not smooth due to several factors, such as mothers who are afraid, anxious, and stressed, which can inhibit the let-down reflex (Sandriani et al., 2023).

In a follow-up assessment conducted seven days after the oxytocin massage intervention, significant improvements were observed in the client's lactation outcomes. The results indicated a marked increase in breast milk production, accompanied by a noticeable reduction in breast engorgement. The intervention protocol involved administering oxytocin massage daily for seven

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consecutive days, with two sessions performed per day. This structured approach—sustained over a week and repeated twice per session—demonstrated enhanced efficacy in stimulating milk flow and alleviating discomfort associated with breast congestion. The findings suggest that consistent and repeated application of oxytocin massage over a seven-day period optimizes its therapeutic benefits, supporting improved lactation performance in the client (Lestari et al., 2022).

In this study, breast milk production was not measured every day during the intervention due to the limited time available to the researcher. It was only evaluated on the seventh day after the intervention was carried out. Oxytocin massage intervention should be monitored daily by measuring breast milk production by mothers. Conducting daily home visits to postpartum mothers can increase exclusive breastfeeding and also feel happier and more satisfied, so mothers are more enthusiastic about providing breast milk to babies. Home visits during the postpartum period by health services also have the impact of providing support to postpartum mothers and increasing breastfeeding in the first 6 weeks. So, the mother's milk production continues to increase because the mother is more diligent in providing breast milk to the baby.

LIMITATION OF THE STUDY

Midwifery care is needed to conduct regular monitoring of the results of interventions that have been given.

CONCLUSION

The results of this study concluded that the respondent, Mrs. FHP, aged 24 years, P1001, with the problem of breast milk, is not smooth in providing interventions according to what has been determined and the client's condition. Established objectives and outcome criteria can help midwifery care address client problems. Oxytocin massage is proven to be effective as a non-pharmacological intervention in overcoming the problem of poor milk production in postpartum women. Appropriate midwifery care can help mothers achieve exclusive breastfeeding success.

DECLARATION OF PATIENT CONSENT

The authors declare that they have obtained consent forms from the appropriate patients. In the form, the patient consented to her care and clinical information being reported in the journal. The patient understands that his/her name and initials will not be published, and reasonable efforts will be made to conceal his/her identity by referring to the client by anonymization.

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CONFLICT OF INTEREST

There is no conflict of interest in this article.

REFERENCES

Anadón, A., Martínez-Larrañaga, M. R., Ares, I., & Martínez, M. A. (2021). Drugs and chemical contaminants in human breast milk. *Reproductive and Developmental Toxicology (Third Edition)*, 1019-1052. https://doi.org/10.1016/B978-0-323-89773-0.00050-3

Balkam, J. J. (2022). Galactagogues and Lactation: Considerations for Counseling Breastfeeding Mothers. *MCN. The American journal of maternal child nursing*, *47*(3), 130–137. https://doi.org/10.1097/NMC.0000000000000810

Henshaw, E. J. (2023). Breastfeeding and postpartum depression: A review of relationships and potential mechanisms. *Current Psychiatry Reports*, *25*(12), 803-808. https://doi.org/10.1007/s11920-023-01471-3

Istighosah, N., & Sari, A. N. (2021). Increase Breast Milk Production for Postpartum Mothers with Oxytocin Massage Using Innovative Massage Tools. *Journal of Maternal and Child Health*, *6*(6), 660–670. https://doi.org/10.26911/thejmch.2021.06.06.04

Josefson, C. C., & Skibiel, A. L. (2023). Chronic Stress Decreases Lactation Performance. *Integrative and Comparative Biology*, *63*(3), 557-568. https://doi.org/10.1093/icb/icad044

Kartilah, T., & Februanti, S. (2023). Oxytocin stimulation massage (PSO) is effective in overcoming the anxiety of breastfeeding mothers and promoting milk production. In *1st UMSurabaya Multidisciplinary International Conference 2021 (MICon 2021)* (pp. 973-981). Atlantis Press. https://doi.org/10.2991/978-2-38476-022-0_108

Kim, Sulbin, & Myeunghee Han. (2024). Prediction Model for Non-Pharmacological Treatment Implementation of Hypertension Based on Residential Area. *Nursing and Health Sciences Journal (NHSJ)* 4 (2):159-70. https://doi.org/10.53713/nhsj.v4i2.354

Lestari, P., Fatimah, F., Ayuningrum, L., Herawati, H. D., & Afifaturrohmah, N. (2022). Influence Oxytocin Massage on Reduce Lactation Problems and Support Infants Growth. *Open Access Macedonian Journal of Medical Sciences*, *10*(T8), 81–85. https://doi.org/10.3889/oamjms.2022.9487

Mbiydzenyuy, N. E., & Qulu, L. A. (2024). Stress, hypothalamic-pituitary-adrenal axis, hypothalamic-pituitary-gonadal axis, and aggression. *Metabolic brain disease*, 1-24. https://doi.org/10.1007/s11011-024-01393-w

McBride, G. M., Stevenson, R., Zizzo, G., Rumbold, A. R., Amir, L. H., Keir, A., & Grzeskowiak, L. E. (2023). Women's experiences with using domperidone as a galactagogue to increase breast milk supply: an Australian cross-sectional survey. *International Breastfeeding Journal*, *18*(1), 11. https://doi.org/10.1186/s13006-023-00541-9

Nagel, E. M., Howland, M. A., Pando, C., Stang, J., Mason, S. M., Fields, D. A., & Demerath, E. W. (2022). Maternal Psychological Distress and Lactation and Breastfeeding Outcomes: A Narrative Review. *Clinical Therapeutics*, *44*(2), 215-227. https://doi.org/10.1016/j.clinthera.2021.11.007

Noviandry R, H., C, E. ., Setya F, C. ., & R, S. . (2023). The Effect Of A Combination Of Speos (Endorphine Massage Stimulation, Oxytocin Massage And Suggestion) On The Success Of The Let Down Reflex And The Production Of The Mother's Milk Production Post Sectio Caesarea At Dr. Hospital. H. Slamet Martodirdjo Pam. *International Journal of Health and Pharmaceutical (IJHP)*, *3*(4), 980–988. https://doi.org/10.51601/ijhp.v3i4.313

Ochala, E. (2023). Addressing Postnatal Challenges: Effective Strategies for Postnatal Care. In *Contemporary Challenges in Postnatal Care*. IntechOpen. http://dx.doi.org/10.5772/intechopen.113883

Volume 03 Number 04
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p-ISSN: 2986-5662
e-ISSN: 2985-959X

Putri, Desy Dwi Cahyani, & Kundarti, F. I. (2025). Midwifery Care for Pregnant Women in the Third Trimester with the Obstetric Complaint of Low Back Pain. *Health and Technology Journal (HTechJ)*, *3*(3), 392–399. https://doi.org/10.53713/htechj.v3i3.365

Safira, A. & Luthfiyana, N. 2024. Maternal Factors Associated With Exclusive Breastfeeding Practices in Situbondo, Indonesia: A Cross-Sectional Study. *Nursing and Health Sciences Journal (NHSJ)* 4 (2):188-93. https://doi.org/10.53713/nhsj.v4i2.361

Sandriani, S., Fitriani, R., & Rahayu, G. Z. (2023). Effect of Oxytocin Massage on Breast Milk Production in Postpartum Mothers: A Case Study. *Genius Midwifery Journal*, *2*(1), 30–38. https://doi.org/10.56359/genmj.v2i1.237

Sari, N., Sunanto, & Hidayati, T. (2023). Effect of Oxytocin Massage on Breast Milk Production among Postpartum Mothers. *Health and Technology Journal (HTechJ)*, *1*(3), 335–341. https://doi.org/10.53713/htechj.v1i3.60

Takahashi, T. (2021). Sensory Stimulation of Oxytocin Release Is Associated With Stress Management and Maternal Care. *Frontiers in Psychology*, *11*, 588068. https://doi.org/10.3389/fpsyg.2020.588068

Tantri, N. A. T., Hardjito, K., Kundarti, F. I. ., & Rahmawati, R. S. N. . (2025). The The Effect of Guided-Imagery and Oxytocin Massage on Breast Milk Production in Post Partum Mothers. *Oksitosin : Jurnal Ilmiah Kebidanan*, *12*(1), 15–33. https://doi.org/10.35316/oksitosin.v12i1.5619

Tarsha, M. S., & Narvaez, D. (2023). The evolved nest, oxytocin functioning, and prosocial development. *Frontiers in Psychology*, *14*, 1113944. https://doi.org/10.3389/fpsyg.2023.1113944

Tomori, C. (2022). Overcoming barriers to breastfeeding. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *83*, 60-71. https://doi.org/10.1016/j.bpobgyn.2022.01.010

Ujung, R. M., & Hutabarat, N. I. (2024). The Effectiveness of Oxytocin Massage and Lavender Aroma Therapy on The Optimization of Breastfeeding Breast-Feeding Women in North Tapanuli District. *Contagion: Scientific Periodical Journal of Public Health and Coastal Health*, *6*(2), 1331-1342. http://dx.doi.org/10.30829/contagion.v6i2.21546

Wahyuningsih, Nurul Hayati, Musviro, and Riska Agustina. (2022). Oxytocin Massage Stramlining Breast Milk: Literature Riview. *Nursing and Health Sciences Journal (NHSJ)* 2 (4):367-73. https://doi.org/10.53713/nhs.v2i4.160

Wijenayake, S., Martz, J., Lapp, H. E., Storm, J. A., Champagne, F. A., & Kentner, A. C. (2023). The contributions of parental lactation on offspring development: It's not udder nonsense! *Hormones and Behavior*, *153*, 105375. https://doi.org/10.1016/j.yhbeh.2023.105375