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Breastfeeding Self-Efficacy at 24 Hours Postpartum with Inadequate Milk Production: A Case Report

Mutiara Harul Aini Pamungkas[1], Yuni Astuti[1*], Noor Wulandari[2]

[1] School of Nursing, Universitas Muhammadiyah Yogyakarta, 55183, Indonesia
[2] RSUD Tidar Kota Magelang, 56125, Indonesia

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[*] **Correspondence:**
Jl. Brawijaya, Geblagan, Tamantirto, Kec. Kasihan, Kabupaten Bantul, Daerah Istimewa Yogyakarta, 55183, Indonesia
yuni.astuti@umy.ac.id, phone: +6285921153838.

Abstract: Exclusive breastfeeding during the first six months is critical for neonatal health and development. Despite government initiatives, the exclusive breastfeeding rate in Indonesia remains below the national target of 80% as set by the Ministry of Health. One of the significant psychological determinants of successful breastfeeding is maternal self-efficacy, or the mother's belief in her ability to breastfeed successfully. This study aimed to explore the breastfeeding self-efficacy of a postpartum mother during the first 24 hours following delivery. This case report employed a descriptive design using a nursing care approach. The Breastfeeding Self-Efficacy Scale–Short Form (BSES-SF), consisting of 14 items rated on a 5-point Likert scale, was used to measure the mother's level of breastfeeding self-efficacy. The assessment was conducted twice: at 2 hours postpartum and again at 24 hours postpartum. The study was carried out in May 2025 at the Bougenville Room of Tidar Hospital, Magelang City. At 2 hours postpartum, the mother demonstrated a high breastfeeding self-efficacy score of 55, indicating strong confidence. However, by 24 hours postpartum, her score had decreased to 49, a moderate level, coinciding with her report of inadequate milk production. This change suggests that early lactation difficulties can negatively influence a mother's self-confidence in breastfeeding. Inadequate breast milk production during the first 24 hours postpartum can reduce maternal breastfeeding self-efficacy. It is essential for nurses to provide education and emotional support in the early postpartum period to help mothers build confidence and improve breastfeeding outcomes.

Keywords: Breastfeeding self-efficacy; Breast milk; Postpartum.

1. Introduction

Breast milk is an invaluable source of nutrition and is essential for the growth and development of infants as soon as they are born (Kim & Yi, 2020). The nutritional needs of infants can be said to be small when compared to adults, but when measured as a percentage of body weight, the nutritional needs of newborns are almost twice that of adults (Astuti et al., 2020). Breast milk contains growth factors and antibodies. Growth factors in breast milk can help the process of organ and hormone maturation, while antibody substances function to help the maturation of the immune system (Sunarto et al., 2022).

Apart from the health aspect, exclusive breastfeeding is also one of the fulfillments of children's basic rights (Ilham et al., 2024). This has been assured in Government Regulation No.33 of 2012 concerning Exclusive Breastfeeding. The policy is supported by the issuance of the Minister of Health Regulations governing breast milk donors, the provision of breast milk corner spaces in workplaces and public facilities, procedures for the use of formula milk, and even procedures for imposing administrative sanctions on health workers and health service facility organizers. Despite the widespread support for exclusive breastfeeding by governments worldwide, exclusive breastfeeding failure continues to occur in Indonesia (Juniar et al., 2023).

According to the Central Bureau of Statistics in 2024, 74.73% of infants aged less than 6 months in Indonesia were exclusively breastfed (Badan Pusat Statistik, 2024). This figure is still below the national target set by the Ministry of Health of the Republic of Indonesia in 2024, which is 80% (Menteri Kesehatan RI, 2022). The lack of exclusive breastfeeding is a common problem for breastfeeding mothers (Oktaviyana et al., 2022).

One of the hurdles to obtaining exclusive breastfeeding is a shortage of milk production during the early stages of childbirth. This can be caused by the lack of stimulation of prolactin and oxytocin hormones, which play an important role in the continuity of breast milk production (Pratiwi & Nurrohmah, 2023). The production of breast milk within the initial 24 hours is crucial, since failure to release breast milk during this period may impede the infant's access to nourishment. Consequently, it is essential to observe milk production within the initial 24 hours postpartum (Widiarta & Megaputri, 2022). Breastfeeding failure is more likely to occur in the first few days after delivery. This condition makes some mothers believe that their breast milk cannot meet the needs of the baby (I. Handayani & Supliyani, 2022). The continual inability to produce breast milk may induce anxiety in the mother and diminish her confidence, leading to a reluctance to breastfeed, which therefore affects the milk supply for the infant (Khusniyati, 2025).

Breastfeeding failure itself can be caused by various factors, such as demographic, socioeconomic, and clinical conditions of both mother and baby (Prima et al., 2020). Wu et al., added that other inhibiting factors of breastfeeding effectiveness include a lack of knowledge, low intention, and poor self-efficacy in mothers (Wu et al., 2021). The level of self-efficacy of mothers substantially impacts the success of exclusive lactation for neonates. Mothers who are confident in their ability to breastfeed their infants exclusively are more likely to achieve success in this endeavor (Pramanik et al., 2020). Conversely, according to Rahmadani & Sutrisna, low maternal confidence in the efficacy of breastfeeding leads to a lack of commitment to breastfeeding, which increases the

likelihood that mothers will discontinue breastfeeding earlier than was recommended. Breastfeeding self-efficacy is also crucial, as mothers can surmount obstacles that may arise during the lactation process with the assistance of high levels of confidence (Rahmadani & Sutrisna, 2022).

2. Methods

The method used in this scientific paper is a descriptive method utilizing a nursing care case study approach, which aims to determine the description of breastfeeding self-efficacy in postpartum mothers with inadequate breast milk production problems in the first 24 hours after delivery. Assessment of the level of self-efficacy in this study using the Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF) questionnaire compiled by Dennis and containing 14 questions covering two dimensions, namely technique and interpersonal thoughts about self-belief in breastfeeding with 5 answer options in the form of a Likert scale (Dennis, 2003). The questionnaire has been validated and translated into Bahasa Indonesia by Handayani et al., and found to be reliable (L. Handayani et al., 2010). Breastfeeding self-efficacy assessment was performed at 2 hours postpartum and 24 hours postpartum. Observations were conducted within the initial 24 hours postpartum to evaluate alterations in breastfeeding self-efficacy levels among mothers with inadequate milk supply. A lower Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF) score indicates a diminished level of breastfeeding self-efficacy in the mother. The inclusion criteria in this study were postpartum mothers without complications, inadequate breast milk production, compos mentis consciousness, and willing to participate as a research respondent. The exclusion criteria for this study were postpartum women who were illiterate and had hearing impairments. Data collection techniques in this study used interviews, physical examinations, assessment of Gordon's patterns, and the observation and documentation of medical records. This study was conducted in May 2025 on one of the patients in the Bougenville room of Tidar Hospital, Magelang City. The patient has given their consent to participate in this research.

3. Results and Discussion

The results of the assessment in a 39-year-old patient with P3A0, a post Sectio Caesarea (SC) patient for indications of fetal distress, and maternal age> 35 years. The patient's baby was born healthy and was treated together with the patient. The patient had previously been admitted to RSUD Tidar Kota Magelang due to premature rupture of membranes at 12 weeks of gestation and was then given a womb booster because the fetal weight was only 500 grams. The patient acknowledged that around 26 weeks of gestation, she had suffered domestic abuse from her husband, resulting in injury to the right cheek region. Her husband is her second spouse, and at the time of the occurrence, their marriage had barely lasted 8 months. The patient said that during her pregnancy, her spouse was seldom present, and she consistently monitored her condition alone. At the time of the initial assessment, the patient complained that her breast milk was not currently coming out, then when stimulated there was no milk coming out, and the patient's breasts were also palpably tender. Despite this, the patient remained confident in her ability to breastfeed because her two previous children were also exclusively breastfed for 2 years. The researcher assessed breastfeeding self-efficacy using the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF), which contains 12 questions about self-belief in breastfeeding with 5 answer options in the form of a Likert

scale. The total score on the Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF) questionnaire ranges from 12-60, where scores of 48-60 = high; 36-48 = medium; 24-36 = low; and 12-24 = very low.

Table 1. Breastfeeding Self-Efficacy - Short Form (BSES-SF) scores at 2 hours postpartum and 24 hours postpartum

Breastfeeding Self-efficacy Indicators	2 Hour Postpartum	24 Hours Postpartum
Determining negative or positive mindsets in breastfeeding	14	13
Emotional reactions to breastfeeding difficulties	12	11
Persistence of effort made to achieve breastfeeding success	14	14
Choosing whether or not to breastfeed	15	11
Total	**55**	**49**

[1] Primary Data, 2025.

The assessment results at 2 hours after delivery obtained a score of 55, which indicates that the client's breastfeeding self-efficacy is in the good category. Based on the observation, A decrease in breastfeeding self-efficacy was observed in the client, indicated by a reduction in score from 55 to 49 at 24 hours postpartum. A lower Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF) score indicates a reduced level of breastfeeding self-efficacy. The patient's breastfeeding self-efficacy remains in the good category at 24 hours postpartum; however, scores have decreased in several indicators. According to the self-efficacy theory articulated by Kingston et al., states that the mother's actions in breastfeeding are influenced by 4 factors, namely the experience of successful breastfeeding (mastery experience), observation of breastfeeding behavior experienced by other women (vicarious experience), verbal persuasion/support from others (social persuasion), and the mother's physiological state (Kingston et al., 2007). The results of client interviews will be analyzed with each of these indicators as follows:

3.1. Determining Negative or Positive Mindset in Breastfeeding

The assessment results obtained two hours post-delivery indicated that, despite inadequate milk production, the client maintained confidence in her ability to provide breast milk, drawing on her experience of exclusively breastfeeding her two previous children for a full two years. for a full two years. The client's breastfeeding self-efficacy score, categorized as good, further substantiates this recognition. The findings align with the research conducted by Asih & Nurlaila which indicates that 59% of multiparous mothers exhibit high breastfeeding self-efficacy in comparison to primiparous mothers (Asih & Nurlaila, 2022). Li et al., indicated that elevated breastfeeding self-efficacy in multiparous mothers results from prior breastfeeding experience. Previous breastfeeding experience is associated with increased motivation among mothers compared to those without such experience (Li et al., 2020). Wulandari et al., added that this experience fosters confidence in mothers regarding their future breastfeeding capabilities (Wulandari et al., 2021).

Nonetheless, a decrease in confidence was observed at 24 hours postpartum. The client expressed her belief that her inadequate breast milk production was attributable to her age and the considerable interval between her previous pregnancies. The result from A. Rahmawati & Wahyuningati states that the majority of mothers aged >35 years choose partial and predominant breastfeeding types. breastfeeding. This choice is influenced by the understanding that advanced

maternal age is associated with increased risks during pregnancy and childbirth, leading these mothers to perceive themselves as too old to provide exclusive breastfeeding (Rahmawati & Wahyuningati, 2020). Mothers who feel their milk production is inadequate tend to have low confidence in breastfeeding. This can lead to a lack of commitment to breastfeeding. Mothers will find it difficult to overcome obstacles that arise during the breastfeeding process and will only focus on the negative aspects (Wulandari et al., 2021).

3.2. Emotional Reactions in the Face of Breastfeeding Difficulties

A mother's anxiety and insecurity regarding perceived inadequate milk supply can contribute to the failure of exclusive breastfeeding. Mothers require assistance and support to sustain milk production, as insecurity and anxiety can impede oxytocin synthesis. Oxytocin stimulates the release of prolactin, which in turn promotes milk production during breastfeeding (Malatuzzulfa et al., 2022). Timiyatun & Oktavianto assert that support from significant others enhances mothers' confidence in their breastfeeding capabilities (Timiyatun & Oktavianto, 2021). During the assessment conducted 2 hours post-delivery, the patient reported experiencing domestic violence from her husband, specifically to the right cheek area, at 26 weeks of pregnancy. Throughout the labor process leading up to this assessment, the patient's husband was not present with the patient. Mothers who have experienced violence from partners or family members before or during pregnancy are more likely to refrain from breastfeeding their infants within the first 12 months of life compared to those who have not encountered such violence (Ribeiro et al., 2021).

The findings of Marantika et al., suggest that the effectiveness of breastfeeding for mothers is significantly influenced by the support of a supportive environment and the assistance of partners or relatives during the lactation process. The inability of mothers to provide breast milk to their infants is influenced by various factors, notably the psychological aspects of the mother, which significantly affect both the breastfeeding process and the production of breast milk. The stress, pressure, and discomfort experienced by the mother can diminish milk production (Marantika et al., 2023).

3.3. Persistence Efforts Made to Achieve Successful Breastfeeding

The assessment results indicated that the client experienced relief and happiness due to the healthy birth of her baby at an advanced age. The client reported that despite encountering numerous challenges during her pregnancy, her feelings of affection remained unaffected. She will persist in her efforts to ensure optimal outcomes for her child through exclusive breastfeeding. The statement is reinforced by the result of the assessment of the mother's relationship with her baby using the Postpartum Bonding Attachment (PBQ) questionnaire, which qualifies in the good category. Mardjun et al., revealed that a mother's strong desire and sincere love to provide the best nutrition for her baby is also a source of motivation for mothers, which will affect the physical and emotional condition of the mother to produce breast milk (Mardjun et al., 2019). Sari mentioned that the hormone oxytocin will increase if the mother feels calm and happy when holding her baby, so that the milk will come out more smoothly and the baby will be more satisfied (Sari, 2020). According to Melo et al., mothers' attitudes towards breastfeeding are influenced by psychological factors, including Maslow's hierarchy of needs for love and affection. The affection between mother and baby motivates the mother to try to do everything for the health of the baby (Melo et al., 2021).

3.4. Choosing Whether or Not to Breastfeed

The client's breastfeeding self-efficacy score was in the sufficient category at 2 hours after delivery. The client reported that her milk production was initially low while lactating her previous

infant; however, it subsequently increased a few days later. When a mother has a positive breastfeeding experience, she is more likely to have strong beliefs about breastfeeding her subsequent child (Khusniyati, 2025).

At 24 hours postpartum, mothers' breastfeeding self-efficacy scores decreased, especially on the indicator of choosing whether or not to breastfeed. The mother said that her milk was not coming out which made her baby cry continuously throughout the night. The client expressed dissatisfaction with this circumstance. In the days following delivery, numerous breastfeeding complications arise. The mother becomes concerned that her infant is not sufficiently fueled due to inadequate milk production. This concern can be eased by the mother's comprehension of the physiology of lactation, which states that milk typically appears 2-3 days after delivery and that the more she breastfeeds, the more milk is produced. This concept is frequently disregarded when mothers experience anxiety (Ulfa & Setyaningsih, 2020). This circumstance also causes mothers to question the quality of their breast milk and assume that a crying infant is always famished. Consequently, they decide to provide additional food and fluids before the baby reaches six months of age (Yunadi et al., 2022).

4. Conclusions

Based on the results of this study, it can be concluded that inadequate breast milk production at 24 hours after delivery affects breastfeeding self-efficacy. This can occur due to several factors that influence each indicator, such as experience, bonding between mother and baby, and husband support. Therefore, it is expected that nurses are able to facilitate knowledge about lactation management, breast milk production physiology and provide emotional support to postpartum mothers so that patients' breastfeeding self-efficacy can increase.

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