

The Onset of Lactation among Postpartum Mothers at Private Midwifery Practice

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Abstract

Introduction: The onset of lactation is the beginning of the breastfeeding process, marked by breast tenderness and the release of colostrum, which occurs ≤ 72 hours after delivery. **Objective:** This study aims to explore the onset of lactation in postpartum mothers at Private Midwifery Practices. **Method:** The study used a descriptive study method involving 83 postpartum mothers in 5 independent midwife practices in Surabaya. Statistical analysis used descriptive statistics through frequency distribution. **Result and Discussion:** Most postpartum mothers were in the reproductive age group (85.5%) and multiparous (73.5%). However, most postpartum mothers did not engage in Early Initiation of Breastfeeding immediately after giving birth (92.8%). Seventy-three percent of mothers had moderate knowledge about lactation, and 80.7% experienced a rapid onset of lactation. **Conclusion:** The onset of lactation is an important part that determines the success of breastfeeding to meet the nutritional needs of the baby.

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Introduction

The postpartum period begins 2 hours and lasts up to 42 days after delivery. During the postpartum period, crucial events occur for a woman, namely uterine recovery and lactation. The lactation process is inseparable from lactogenesis, or the initiation of breast milk production. Lactogenesis consists of three stages, each influenced by several hormones in the body. One important part of this stage is lactogenesis II. During this phase, progesterone levels decrease and prolactin levels increase, resulting in breast tenderness due to a surge in milk volume, known as the onset of lactation (Naomi O. Hester, 2022).

The onset of lactation varies among postpartum mothers. However, it typically occurs within ≤ 72 hours after delivery. Lactation onset is measured by the mother's perception of the time when her breasts feel heavy, hard, or tense until they release colostrum. Lactation onset that occurs more than 72 hours in postpartum mothers is classified as late onset (Peng et al., 2024). Lactation onset is a critical indicator of the success of subsequent breastfeeding. Therefore, monitoring lactation onset by healthcare professionals is an essential service in the early postpartum period.

Breast milk is the primary source of nutrition for infants. It contains macronutrients and micronutrients that are easily digested by babies, thus providing optimal growth and development. The WHO recommends exclusive breastfeeding for infants up to 6 months of age, followed by the addition of safe complementary foods (MPASI) up to 2 years of age, as well as Early Initiation of Breastfeeding within at least one hour of birth (World Health Organization, 2009). Based on the above background, research is needed that aims to explore the onset of lactation in postpartum mothers in the Independent Midwife Practice (PMB) in Surabaya.

Method

The research method used is a descriptive survey research method. The aim of this study is to explore characteristic of postpartum mother that have birthing at private midwifery practice (PMB) in Surabaya. Private Midwifery Practice (PMB) is a health service facility provided by midwives individually (Kemenkes, 2017). This research was conducted in October-December 2022. The inclusion criteria are term and vaginal birth, arm circumference ≥ 23.5 cm, and birth at midwifery private practice in Surabaya. The exclusion criteria are postpartum mother with health problem, complication, or breast health problem. Data was collected using medical records, questionnaires, and interview. The research was conducted with due regard to patient privacy and ethical clearance. The collected data is presented in distribution of frequency.

Result and Discussion

1. Result

This study involved 83 postpartum mothers who gave birth at 5 PMB in Surabaya, with a distribution as shown in Table 1.

Table 1
Distribution of Respondents

Name of Private Midwifery Practice	Frequency n=83 (%)
PMB S	49 (59.04)
PMB L	9 (10.84)
PMB FH	15 (18.07)
PMB E	4 (4.82)
PMB M	6 (7.23)

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Based on Table 2, the majority of postpartum mothers were in the reproductive age group (85.5%) and multiparous (73.5%). However, most postpartum mothers perform Early Initiation of Breastfeeding (EIBF) immediately after giving birth (92.8%). In terms of lactation onset, postpartum mothers in the study experienced lactation onset ≤ 72 hours after giving birth (80.7%). Meanwhile, most postpartum mothers' knowledge regarding lactation onset was in the moderate category (73.5%).

Table 2
Characteristic of Respondents

Variable	Category	Frequency, n=82 (%)
Mother Age (year)	<20 and >35	12 (14.5)
	20-35	71 (85.5)
Parity	Primipara	22 (26.5)
	Multipara	61 (73.5)
Initiation of Breastfeeding	Yes	77 (92.8)
	No	6 (7.2)
Knowledge Level of Lactation	Low	4 (4.8)
	Moderate	61 (73.5)
Onset of Lactation	High	18 (21.7)
	Slow	16 (19.3)
	Rapid	67 (80.7)

2. Discussion

Age and Parity of Postpartum Mothers

The study results showed that the majority of respondents were of reproductive age, namely 20-35 years (85.5%). This finding aligns with other research showing that the majority (82%) of postpartum mothers were between 20-35 years old (Mertasari & Juliani, 2022). The age group of 20-35 is the reproductive age group, which is related to a woman's reproductive and mental readiness for pregnancy. Several studies have found that pregnancy at ages <20 or >35 can have many negative impacts on both mother and baby, such as childbirth complications, cesarean delivery, hemorrhage, prematurity, and maternal and neonatal mortality (ACOG, 2022; de la Calle et al., 2021).

Based on parity, the majority of postpartum mothers in this study were multiparous (73.5%), indicating that respondents had experience throughout pregnancy and postpartum. This is consistent with research conducted in this study, which found that the majority of postpartum mothers were multiparous (67%), with the highest number of children being three living children (Mertasari & Juliani, 2022). Parity is an important characteristic in midwifery care because it determines experience, knowledge, utilization of health services, and potential health problems. Mothers with higher parity tend to prefer giving birth at certain health facilities due to previous experiences regarding the quality of care they received (Teferi et al., 2022).

Initiation of Breastfeeding

This study found that most mothers practice early breastfeeding (EIBF) after giving birth (92.8%). Early Initiation of Breastfeeding (EIBF) is the process of breastfeeding for the first time by a mother immediately after giving birth, within one hour. The WHO recommends early breastfeeding as essential care for newborns due to its significant benefits for both mother and baby (World Health Organization, 2009). This study is in line with other studies which found that as many as 51.6% of mothers had carried out EIBF (Syahri et al., 2024). However, these results are not in line with research conducted in Saudi Arabia which found that only 23.1% of mothers EIBF done (Alrasheedi, 2023).

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EIBF practice in some postpartum mothers is not carried out because problems occur immediately after birth, such as perineal rupture, hypothermia in babies, and asphyxia, so more intensive treatment is needed. There are many factors that cause EIBF not to be implemented after delivery, namely complications in the mother or baby, number of antenatal visits, method of delivery, environmental factors, support, and also knowledge gaps (Alrasheedi, 2023; Ayalew et al., 2022; Rubagumya et al., 2025).

Knowledge

The research found that 73.5% of respondents had moderate knowledge about lactation. Another study also found that 65.61% of postpartum mothers had good knowledge about lactation or breastfeeding (Naja et al., 2022). Knowledge is a crucial factor in shaping positive attitudes toward health behaviors. Similarly, knowledge about lactation significantly influences a mother's breastfeeding behavior. Low knowledge about lactation contributes to low breastfeeding success (Gebeyehu et al., 2023). A person's level of knowledge about lactation can be influenced by many factors, such as education, social and economic status, culture, and health services (Malekian et al., 2025).

Onset of Lactation

The study results showed that 80.3% of respondents experienced lactation onset ≤ 72 hours postpartum, indicating a normal condition. A systematic review in China found that 31% of postpartum mothers experienced delayed lactation onset in a population of 17,160 mothers (Miao et al., 2023). Other research also shows figures that are not much different regarding the incidence of late onset of lactation, namely 30% in China and the United States (Peng et al., 2024). Various factors can cause a delay in the onset of lactation, both internal and external. These factors include skin-to-skin contact, EIBF, primiparity, cesarean delivery, postpartum depression, obesity, and breast abnormalities (Güneş & Yalçın, 2023; Zhao et al., 2022; Miao et al., 2023; Peng et al., 2024).

Conclusion

The initiation of lactation in postpartum mothers who gave birth at 5 PMBs in Surabaya showed positive results, as the majority experienced breast milk production ≤ 72 hours postpartum. This indicates that midwifery services at PMB play a crucial role in supporting successful initiation of lactation during the postpartum period. Midwifery support through breastfeeding education, encouragement of early breastfeeding initiation, and monitoring during the postpartum period contributed positively to accelerating breast milk production. The initiation of lactation is an important factor that needs to be considered by mothers, families, and health care providers because it is a significant indicator of future breastfeeding success. Overall, this descriptive study provides baseline information on the initiation of lactation in postpartum mothers at PMBs, which can be used as evaluation material to improve the quality of lactation education and care. Factors associated with the initiation of lactation require further analysis in future research.

Reference

- ACOG. (2022). *Pregnancy at Age 35 Years or Older*. 11.
- Alrasheedi, A. T. (2023). [Factors associated with early initiation of breastfeeding in central Saudi Arabia: A hospital-based survey](https://doi.org/10.1186/s13006-023-00598-6). *International Breastfeeding Journal*, 18(1), 62. <https://doi.org/10.1186/s13006-023-00598-6>
- Ayalew, D. D., Kassie, B. A., Hunegnaw, M. T., Gelaye, K. A., & Belew, A. K. (2022). [Determinants of Early Initiation of Breastfeeding in West Belessa District, Northwest Ethiopia](https://doi.org/10.1177/11786388211065221). *Nutrition and Metabolic Insights*, 15, 11786388211065221. <https://doi.org/10.1177/11786388211065221>
- de la Calle, M., Bartha, J. L., Lopez, C. M., Turiel, M., Martinez, N., Arribas, S. M., & Ramiro-Cortijo, D. (2021). [Younger Age in Adolescent Pregnancies Is Associated with Higher Risk of Adverse Outcomes](https://doi.org/10.3390/ijerph18168514). *International Journal of Environmental Research and Public Health*, 18(16), 8514. <https://doi.org/10.3390/ijerph18168514>
- Gebeyehu, N. A., Tegegne, K. D., Shewangashaw, N. E., Biset, G., Abebaw, N., & Tilahun, L. (2023). [Knowledge, attitude, practice and determinants of exclusive breastfeeding among women in Ethiopia: Systematic review and meta-analysis](https://doi.org/10.1016/j.puhip.2023.100373). *Public Health in Practice*, 5, 100373. <https://doi.org/10.1016/j.puhip.2023.100373>
- Güneş, B., & Yalçın, S. S. (2023). [Delayed Onset of Lactation and Accompanying Perinatal Factors in Mothers Who Delivered at the End of A Normal Term Pregnancy](https://doi.org/10.54005/geneltip.1275708). *Genel Tıp Dergisi*, 33(3), 342–346. <https://doi.org/10.54005/geneltip.1275708>
- Kemenkes. (2017). *Permenkes No. 28 Tahun 2017 Tentang Izin Dan Penyelenggaraan Praktik Bidan*. Database Peraturan Perundang-Undangan Indonesia - [PERATURAN.GO.ID]. <https://www.peraturan.go.id/id/permenkes-no-28-tahun-2017>
- Malekian, M., Irving, M., & Hundley, V. (2025). [Factors associated with breastfeeding knowledge and attitudes among non-pregnant, nulliparous women of reproductive age: A scoping review](https://doi.org/10.1016/j.midw.2025.104511). *Midwifery*, 148, 104511. <https://doi.org/10.1016/j.midw.2025.104511>
- Mertasari, L., & Juliani, M. (2022). [Contribution of Early Breastfeeding Initiation to Onset of Lactation in Postpartum Mothers and Breastfeeding in Midwives Independent Practice](https://doi.org/10.23887/ijnse.v6i2.51520). *International Journal of Natural Science and Engineering*, 6(2), 47–54. <https://doi.org/10.23887/ijnse.v6i2.51520>
- Miao, Y., Zhao, S., Liu, W., Jiang, H., Li, Y., Wang, A., & Zhang, Y. (2023). [Prevalence and risk factors of delayed onset lactogenesis II in China: A systematic review and meta-analysis](https://doi.org/10.1080/14767058.2023.2214833). *The Journal of Maternal-Fetal & Neonatal Medicine*, 36(1), 2214833. <https://doi.org/10.1080/14767058.2023.2214833>
- Naja, F., Chatila, A., Ayoub, J. J., Abbas, N., Mahmoud, A., Abdulmalik, M. A., Nasreddine, L., & MINA collaborators. (2022). [Prenatal breastfeeding knowledge, attitude and intention, and their associations with feeding practices during the first six months of life: A cohort study in Lebanon and Qatar](https://doi.org/10.1186/s13006-022-00456-x). *International Breastfeeding Journal*, 17(1), 15. <https://doi.org/10.1186/s13006-022-00456-x>
- Naomi O. Hester. (2022). [Physiology of Lactation](https://doi.org/10.1016/B978-0-323-68013-4.00003-1). In *Breastfeeding* (pp. 58–92). Elsevier. <https://doi.org/10.1016/B978-0-323-68013-4.00003-1>
- Peng, Y., Zhuang, K., & Huang, Y. (2024). [Incidence and factors influencing delayed onset of lactation: A systematic review and meta-analysis](https://doi.org/10.1186/s13006-024-00666-5). *International Breastfeeding Journal*, 19(1), 59. <https://doi.org/10.1186/s13006-024-00666-5>

- Rubagumya, D., Abeid, M., Aghan, E., & Noorani, M. (2025). [Barriers to Early Initiation of Breastfeeding: A Hospital-Based Qualitative Study](#). *The East African Health Research Journal*, 9(1), 78–85. <https://doi.org/10.24248/eahrj.v9i1.825>
- Syahri, I. M., Laksono, A. D., Fitria, M., Rohmah, N., Masruroh, M., & Ipa, M. (2024). [Exclusive breastfeeding among Indonesian working mothers: Does early initiation of breastfeeding matter?](#) *BMC Public Health*, 24(1), 1225. <https://doi.org/10.1186/s12889-024-18619-2>
- Teferi, H. M., San Sebastian, M., & Baroudi, M. (2022). [Factors associated with home delivery preference among pregnant women in Ethiopia: A cross-sectional study](#). *Global Health Action*, 15(1), 2080934. <https://doi.org/10.1080/16549716.2022.2080934>
- World Health Organization. (2009). *Infant and young child feeding: Model chapter for textbooks for medical students and allied health professionals*. 99.
- Zhao, J., Li, Y., Yu, M., Yang, F., Yu, Q., Wang, X., Bu, S., & Liao, P. (2022). [Maternal Physical Activity in the Third Trimester and Delayed Onset of Lactogenesis](#). *Chinese General Practice*, 25(18), 2268. <https://doi.org/10.12114/j.issn.1007-9572.2022.0070>