

The Relationship Between Early Breastfeeding Initiation (EBI) and Bonding Attachment Between Mother and Newborn at the Bineh Krueng Health Center, Southwest Aceh Regency, in 2026

Eka Ilhamni¹, Fera Sawita², Wirdayanti³, Asmaul Husna⁴, Suzanna Fitri⁵

^{1, 2, 3, 4, 5} PUI-Gantle Baby Care Fakultas Keperawatan dan Kebidanan, Universitas Prima
Indonesia, Medan, Indonesia

Corresponding Author: ekadafa841@gmail.com

ABSTRACT

Early Breastfeeding Initiation (EBI) is an important early intervention in forming an emotional bond between mother and baby through skin-to-skin contact in the first hour of life. The implementation of EBI can increase bonding attachment which plays a role in children's emotional and psychological development. However, not all mothers carry out EBI optimally so that it can affect the quality of the mother-baby relationship. To determine the relationship between Early Breastfeeding Initiation (EBI) and bonding attachment between mother and newborn at the Bineh Krueng Health Center, Southwest Aceh Regency. This study is a quantitative research with an observational analytical design using a *cross sectional* approach. The population in this study is all mothers who give birth to newborns as many as 60 people. The sampling technique used the Slovin formula so that a sample of 60 respondents was obtained. Data analysis using the Chi-Square test. The results showed that most of the mothers carried out EBI as many as 41 respondents (68.3%) and had good bonding attachment as many as 39 respondents (65%). The results of the Chi-Square test showed a value of $p = 0.002$ ($p < 0.05$) which means that there is a significant relationship between EBI and bonding attachment between mother and newborn. There is a significant relationship between Early

Breastfeeding Initiation (EBI) and maternal and newborn attachment bonding. It is hoped that health workers can improve education and assistance to mothers and families in the implementation of EBI so that it can be carried out optimally to support the formation of emotional bonds between mothers and babies.

Keywords: Education, Newborns, Anxiety, Primitive Mothers

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INTRODUCTION

Early Breastfeeding Initiation (EBI) is an evidence-based and globally recommended maternal and infant health intervention. The World Health Organization (WHO) affirms that EBI, through skin-to-skin contact and breastfeeding within the first hour of life, plays an important role in lowering neonatal mortality, increasing the success of exclusive breastfeeding, and strengthening the initial emotional connection between mother and baby (WHO, 2023; WHO, 2024). UNICEF also states that the first hour after birth is the golden hour that determines the success of breastfeeding and the formation of emotional bonds between mother and baby (UNICEF, 2023).

Bonding attachment is an initial emotional bond formed through early interaction in the form of touch, eye contact, and the mother's response to the baby's needs. WHO emphasizes that bonding attachments formed since the neonatal period play an important role in the psychological development, emotional regulation, and security of children in the future (WHO, 2024). Thus, EBI is not only seen as a nutritional intervention, but also as a fundamental strategy in the development of children's mental and emotional health from the beginning of life. Although the benefits of EBI on bonding attachment have been scientifically proven, its implementation in Indonesia is still not optimal. The Ministry of Health of the Republic of Indonesia reported that the national EBI coverage is still below the target of maternal and child health programs, with considerable variation between regions (Ministry of Health of the Republic of Indonesia, 2023). The low implementation of EBI has the potential to hinder the process of forming optimal bonding attachments, as emphasized in the research of Rahayu

et al. (2022)

Although EBI has been strongly recommended, its implementation in Indonesia is still not optimal. The Ministry of Health of the Republic of Indonesia reported that the national EBI coverage is still below the target set in the maternal and child health program, and shows variation between regions (Ministry of Health of the Republic of Indonesia, 2023).

During EBI administration the baby will get colostrum. Colostrum is the first breast milk that comes out between the first and fifth days after delivery, it is solid yellow, thick, and sticky. Colostrum is rich in antibodies, especially IgA, leukocytes, and lactoferrin, which play an important role in protecting babies from infections and strengthening the immune system. In addition, colostrum is high in protein as well as essential vitamins and minerals such as vitamin A and zinc, which support the baby's early growth and health. Colostrum also has laxative properties that help babies expel meconium and prevent neonatorum jaundice (Belawati, 2021).

Babies who do EBI have a higher chance of success in exclusive breastfeeding. Exclusive breastfeeding is essential for a child's survival. This is because exclusive breastfeeding can protect children from various diseases that they are prone to, such as diarrhea and pneumonia, which can be fatal. In addition, evidence suggests that children who receive breast milk have higher intelligence test results. They also have a lower chance of being obese or overweight, as well as a lower susceptibility to diabetes later on. Globally, increasing breastfeeding can save more than 820,000 children every year and prevent up to 20,000 cases of breast cancer in women per year (Tiangsa Sembiring, 2022; WHO, 2023). Confirms that the success of EBI is closely related to increased bonding attachment through hormonal mechanisms, specifically the release of oxytocin which affects the mother's affectionate behavior towards the baby (Widstrom, 2022)

At the regional level, the Aceh Provincial Health Office reported that the implementation of EBI still faces obstacles, including limitations in maternal education, variations in health worker practices, and factors in the childbirth service system (Aceh Health Office, 2023). Data from the Southwest Aceh Regency Health Office also shows that the implementation of EBI in health care facilities has not been fully consistent, so it has the potential to affect the success of breastfeeding and the formation of bonding attachments between mothers and newborns

(Southwest Aceh Regency Health Office, 2024). This condition shows that the low implementation of EBI not only has an impact on the nutritional aspect of the baby, but also has the potential to inhibit the formation of optimal bonding attachments. Emotional bonds that are not well formed can have an impact on low maternal responsiveness, increased maternal anxiety, and the risk of disruption of children's psychosocial development.

METHOD

This study is a quantitative research with an observational analytical design using a cross sectional approach. Cross-sectional design is a research method that observes independent variables and dependent variables simultaneously at one measurement time, so that it can be used to determine the relationship between risk factors and events at the same time with ethical principles (usman Chairul, 2017) and Huda, C. (2017). This research was carried out at the Bineh Krueng Health Center, Southwest Aceh Regency. The selection of the research location was based on the consideration that the health center is one of the health service facilities that has a fairly representative number of maternal visits to be conducted. The research period was carried out from February to March 2026, which included the preparation stage, data collection, and data analysis.

The population in this study was all mothers who gave birth to newborns at the Bineh Krueng Health Center during the study period, with an estimated population of between 50 and 100 mothers. The research sample is part of the population that meets the inclusion and exclusion criteria that have been set by the researcher. The determination of the number of samples was carried out using the Slovin formula in (Huda & Waluyo, 2022), so that a total sample of 60 respondents was obtained. The inclusion criteria in this study included mothers who gave birth to full-term babies with a gestational age of ≥ 37 weeks, babies in good health without severe congenital abnormalities, and mothers who were willing to participate and give written consent. Meanwhile, exclusion criteria include mothers who experience severe postpartum complications, infants who require care in the neonatal intensive care room (RPIN), and mothers who cannot communicate well.

RESULTS AND DISCUSSION

This research was carried out at the Bineh Krueng Health Center, Southwest Aceh Regency from February to March 2026. This health center is one of the first level health service facilities that provides maternal and child health services, including childbirth services and newborn care. The implementation of Early Breastfeeding Initiation (EBI) has become part of the childbirth service procedure, although in practice it is still influenced by the condition of the mother, baby, and support from health workers and families.

Table 1. Distribution Table of Respondents by Age

| Features | Frequency (n) | Percentage (%) |
|----------------------|---------------|----------------|
| Mother's Age (Years) | | |
| ≤ 20 Years | 6 | 10,0 |
| 20 - 35 Years | 42 | 70,0 |
| > 35 Years Old | 12 | 20,0 |
| Quantity | 60 | 100% |

Data source: Processed by the author, 2026

The majority of respondents were of healthy reproductive age (20–35 years).

Table 2. Distribution of Respondents by Education

| Education | Frequency (n) | Percentage (%) |
|--------------------|---------------|----------------|
| SD | 10 | 16,7 |
| Junior High School | 18 | 30,0 |
| High School | 24 | 40,0 |
| College | 8 | 13,3 |
| Quantity | 60 | 100 |

Data source: Processed by the author, 2026

Table 3. Respondent Distribution by Occupation

| Jobs | Frequency (n) | Percentage (%) |
|-----------------------|---------------|----------------|
| Housewives | 38 | 63,3 |
| Self-employed | 12 | 20,0 |
| Civil Servant/Private | 10 | 16,7 |
| Quantity | 60 | 100 |

Data source: Processed by the author, 2026

Table 4. Early Initiation Breastfeeding (EBI) Overview

| EBI Implementation | Frequency (n) | Percentage (%) |
|--------------------|---------------|----------------|
| Done | 41 | 68,3 |
| Not done | 19 | 31,7 |
| Quantity | 60 | 100 |

Data source: Processed by the author, 2026

Most mothers have carried out Early Breastfeeding Initiation according to the procedure.

Table 5. Bonding Attachment Overview

| Bonding Attachment | Frequency (n) | Percentage (%) |
|--------------------|---------------|----------------|
| Good | 39 | 65 |
| Less | 21 | 35 |
| Quantity | 60 | 100 |

Data source: Processed by the author, 2026

Table 6. Relationship of EBI with Bonding Attachment

| EBI | Good bonding | Less Bonding | Total |
|----------|--------------|--------------|-------|
| Done | 32 (78,0%) | 9 (22,0%) | 41 |
| Not done | 7 (36,8%) | 12 (63,2%) | 19 |
| Quantity | 39 | 21 | 60 |

Data source: Processed by the author, 2026

The results of the *Chi-Square test* obtained a value of $p = 0.002$ ($p \leq 0.05$), which showed that there was a significant relationship between Early Initiation breastfeeding and *bonding attachment* between mother and newborn.

Discussion

Early Breastfeeding Initiation (EBI) is a very important early intervention in forming an emotional connection between mother and baby through skin-to-skin contact in the first hour of life (golden hour). During this period, the baby is in a state of calm alertness so that it is responsive to the mother's touch and voice. This process stimulates the release of the hormone oxytocin which plays a role in increasing comfort, affection, and emotional attachment between mother and baby, Halimatussakdiah, H. (2017). The results showed that mothers who carried out EBI had better bonding attachment than those who did not

carry out EBI. Strong emotional bonds from an early age contribute to a child's psychological development, including self-confidence, emotional regulation, and social abilities. On the other hand, the lack of optimal bonding attachment can have an impact on the mother's lack of responsiveness to the baby's needs.

The characteristics of the respondents showed that most of the mothers were of healthy reproductive age, had secondary education, and had the status of housewives. This condition supports the mother's readiness to receive information and build a relationship with the baby. In addition, the majority of mothers have implemented EBI, although there are still obstacles such as postpartum conditions and lack of support from health workers. Most mothers also show good bonding attachment, characterized by a positive emotional response and closeness to the baby. Further analysis showed a significant relationship between EBI and bonding attachment, where EBI plays an important factor in the formation of early emotional bonds.

Overall, the results of this study confirm that EBI has an important role not only in the nutritional aspect, but also in building the emotional relationship between mother and baby. Therefore, the support of health workers, families, and health service policies is needed to ensure the optimal implementation of EBI to support children's overall growth and development.

CONCLUSION

Based on the results of the study, it can be concluded that the implementation of Early Breastfeeding Initiation (EBI) has a significant relationship with bonding attachment between mother and newborn. Mothers who carry out EBI tend to have better emotional bonds compared to mothers who do not carry out EBI. This shows that early contact through EBI plays an important role in forming emotional closeness, increasing affection, and maternal responsiveness to the baby's needs. Although most mothers have implemented EBI, there are still several obstacles in its implementation, so support from health workers, families, and increased education for pregnant women is needed. Thus, EBI needs to continue to be improved as an integral part of maternal and child health services to support the formation of optimal emotional relationships and better infant growth and development.

REFERENCES

- Arikunto, S. (2023). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Badan Pusat Statistik Aceh. (2024). *Statistik Kesehatan Provinsi Aceh Tahun 2024*. Banda Aceh: BPS Aceh.
- Bappenas. (2023). *Tujuan Pembangunan Berkelanjutan (Sustainable Development Goals)*. Jakarta: Kementerian PPN/Bappenas.
- Chairunnisa, R., & Juliarti, D. (2022). Asuhan keperawatan pada bayi baru lahir dalam masa transisi kehidupan. *Jurnal Keperawatan Klinis*, 9(2), 112–119.
- Halimatussakdiah, H. (2017). Tindakan Keperawatan Post Partum Normal dan Adaptasi Fisiologi Pada Ibu Post Partum di Rumah Sakit Aceh. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*, 2(4).
- Huda, C. (2017). Pengetahuan perawat pelaksana dalam kode etik keperawatan indonesia di ruang rawat inap rumah sakit jiwa banda aceh. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*, 2(4).
- Huda, C., & Waluyo, A. (2022). Modified Prone Position pada Pasien Long COVID-19 untuk Meningkatkan Saturasi Oksigen Perifer. *Jurnal Keperawatan Silampari*, 5(2). <https://doi.org/https://doi.org/10.31539/jks.v5i2.3584>
- Kementerian Kesehatan Republik Indonesia. (2022). *Pedoman Pelayanan Kesehatan Ibu dan Bayi Baru Lahir*. Jakarta: Kemenkes RI.
- Kementerian Kesehatan Republik Indonesia. (2023). *Standar Pelayanan Postnatal*. Jakarta: Direktorat Kesehatan Keluarga.
- Nurul, A. (2023). *Keperawatan Neonatus, Bayi, dan Balita*. Yogyakarta: Pustaka Pelajar.
- Sangapta, D., Lestari, W., & Rahman, F. (2019). Peran antropometri dalam pemantauan pertumbuhan dan penurunan angka kematian bayi. *Jurnal Kesehatan Masyarakat*, 14(1), 45–53.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- United Nations Children's Fund. (2022). *Improving Newborn Care Practices*. New York: UNICEF.
- usman Chairul, said; H. (2017). Pengetahuan Perawat Pelaksana Dalam Kode Etik Keperawatan Indonesia Di Ruang Rawat Inap Rumah

Sakit Jiwa Banda Aceh. Jurnal Ilmiah Mahasiswa Fakultas Keperawatan.

Widianingtyas, S. I., Wardhani, I. K., Prastaywati, I. Y., & Lusiani, E. (2022). Keperawatan Gawat Darurat: Pendekatan dengan Persistem. Syiah Kuala University Press.

World Health Organization. (2022). Postnatal Care for Mothers and Newborns. Geneva: WHO.

World Health Organization. (2023). Newborn Health Guidelines and Recommendations. Geneva: WHO.

World Health Organization. (2023). Breastfeeding and Early Initiation of Breastfeeding. Geneva: WHO.