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The Relationship between Early Breastfeeding Initiation and Bonding Attachment with Exclusive Breastfeeding

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ABSTRACT

The World Health Organization states that exclusive breastfeeding is the gold standard for infant nutrition. The national target in Indonesia for exclusive breastfeeding from 2020–2024 is 80%, but in 2023 rate was only 63.9%, with East Java at 74.8%, Bangkalan district at 49.4%, and The Blega Health Center at 48.14%. Exclusive breastfeeding is influenced by several factors, including Early Initiation of Breastfeeding (EIBF) and bonding attachment. This study aimed to examine the relationship between EIBF and bonding attachment with exclusive breastfeeding. This quantitative, retrospective study used a survey method involving 53 mothers with children aged 7–12 months in The Blega Health Center area. Respondents were selected using accidental sampling in March 2025. Data was collected through interviews and a questionnaire. EIBF and exclusive breastfeeding were assessed via direct interviews, while bonding attachment was measured using the Postpartum Bonding Questionnaire (PBQ) adapted from Brackington (2001). Data was analyzed using the Chi-Square test and contingency coefficient with SPSS for Windows. Most respondents reported EIBF (69.8%), bonding attachment (75.5%), and exclusive breastfeeding (58.5%). There was a significant but weak relationship between EIBF and exclusive breastfeeding ($p = 0.019$; coefficient = 0.342), and a significant moderate relationship between bonding attachment and exclusive breastfeeding ($p = 0.001$; coefficient = 0.446). This study found significant relationships between EIBF and bonding attachment with exclusive breastfeeding. Strengthening postnatal care that promotes both early breastfeeding and maternal-infant bonding is essential.

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1. INTRODUCTION

The International Health Organization has been stated that exclusive breastfeeding is the gold standard for child nutrition. Exclusive breastfeeding refers to providing only breast milk to infants immediately after birth for a period of six months, without giving any additional food or drink to the infant[1]. The World Health Organization (WHO) recommends initiating breastfeeding within the first hour after birth through Early Initiation of Breastfeeding (EIBF), continuing with exclusive breastfeeding for six months, and then continued breastfeeding alongside complementary foods until the age of two[2].

The exclusive breastfeeding target in 2020 to 2024 in the Ministry of Health Strategic Plan was 80%[3]. In 2023, Indonesia had not been yet achieved this target, with the national rate at 63.9%[1]. Similarly, in East Java Province the rate was at 74.8%, in Bangkalan Regency at 49.4%[4], and at The Blega Health Center in 2024 it was only 48.14%.

According to Lawrence Green, the implementation of exclusive breastfeeding is influenced by predisposing factors such as knowledge, age, beliefs, employment, physical condition, and bonding attachment; enabling factors such as facilities, infrastructure, and EIBF; and reinforcing factors including family and health worker support[5–8]. Novita (2022) stated that the implementation of exclusive breastfeeding is related to Early Initiation of Breastfeeding

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(EIBF)[9]. According to the study of Kim et al. (2024), the duration of breastfeeding mothers associated with bonding attachments between mothers and baby[10].

The Indonesian government has been implemented policies to increase exclusive breastfeeding, including Government Regulation No. 33 of 2012. EIBF within one hour of birth must be facilitated by healthcare workers and health service providers. The baby's touch and suckling during EIBF can foster a bonding attachment between mother and baby, stimulating the hormones oxytocin and prolactin necessary for milk production[11]. Based on this presentation, researchers intend to examine the interrelationship of early breastfeeding initiation and bonding attacks with exclusive breastfeeding.

2. METHOD

The following research applies quantitative research, using a survey research design and a retrospective approach. Accidental sampling is a technique applied in this study when respondents visited The Blega Health Center in March 2025. Respondents in this study were breastfeeding mothers in the working area of The Blega Health Center in total of 53 people. The inclusion criteria are mothers who have children aged 7-12 months, with a history of normal labor, who can read and write, and are willing to be respondents.

The independent variables were early breastfeeding initiation and bonding attachment, while the dependent variable was exclusive breastfeeding. Early initiation of breastfeeding (EIBF) and exclusive breastfeeding were assessed through direct interviews with respondents. The timing of EIBF, specifically whether it was performed within the first hour after birth, was also obtained through these interviews. The bonding attachment was measured using the Postpartum Bonding Questionnaire (PBQ), adapted from Brackington (2001), which has been validated and is considered reliable. Data analysis was performed using SPSS for Windows. The Chi-Square Test was chosen to determine the relationship between early breastfeeding initiation and bonding attachment with exclusive breastfeeding, and the contingency coefficient test was used to measure the strength of the relationship between variables.

3. RESULTS AND DISCUSSION

3.1. General Characteristics of Breastfeeding Mothers at The Blega Health Center

Table 1. Frequency distribution of breastfeeding mother's characteristics at The Blega Health Center

Characteristics	Category	Frequency (f)	Percentage (%)
Age	<20 years	4	7.5
	20-35 years	33	62.3
	>35 years	16	30.2
Total		53	100
Level of education	Primary school	2	3.8
	Middle school	8	15.1
	High school	19	35.8
	Higher education	24	45.3
Total		53	100
Working status	Working	25	48.2
	Not working	28	52.8
Total		53	100

Table 1 shows the general characteristics of breastfeeding mothers at The Blega Health Center. Most respondents, or 62.3% were aged 20–35 years, while 7.5% were under 20 years and 30.2% were over 35 years. Regarding education level, 3.8% of respondents completed primary school, 15.1% middle school, 35.8% high school, and 45.3% had higher education. In terms of working status, more than half of the respondents, or 52.8% were not working, while 48.2% were employed.

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3.2. Early Initiation of Breastfeeding of Breastfeeding Mothers at The Blega Health Center

Table 2. Frequency distribution of breastfeeding mother's early initiation of breastfeeding at The Blega Health Center

EIBF	Frequency (f)	Percentage (%)
EIBF	37	69.8
Not EIBF	16	30.2
Total	53	100

Table 2 shows more than half of the respondents, namely a number of 37 mothers (69.8%) in the working area of The Blega Health Center carried out the early breastfeeding process within one hour after delivery. Early breastfeeding initiation is a step that takes place after the mother gives birth to her child, where the baby is given the opportunity to find or find her mother's nipples independently without the intervention of others[12]. Implementation of EIBF is related to several supporting components such as the physical and psychological readiness of the mother, age, education and work related to the mother's knowledge, maternity places, family support, husband, and the role of health workers[12,13].

3.3. Bonding Attachment of Breastfeeding Mothers at The Blega Health Center

Table 3. Frequency distribution of breastfeeding mother's bonding attachment at The Blega Health Center

Bonding Attachment	Frequency (f)	Percentage (%)
Bonding Attachment	40	75.5
No Bonding Attachment	13	24.5
Total	53	100

Table 3 displays most of the respondents, namely 40 mothers (75.5%) in the working area of The Blega Health Center have a bonding attachment with their baby. Bonding attachment means physical relationships and feelings that occur immediately after the birth of the baby, which can create an attachment between parents and their children. Includes the outpouring of love and attraction to each other[14]. Bonding attachment is influenced by age, parity, husband's support, the physical and emotional condition of the mother, and the role of health workers[15,16].

3.4. Exclusive Breastfeeding of Mothers at The Blega Health Center

Table 4. Frequency distribution of mother's exclusive breastfeeding at The Blega Health Center

Exclusive Breastfeeding	Frequency (f)	Percentage (%)
Exclusive breastfeeding	31	58.5
Not Exclusive breastfeeding	22	41.5
Total	53	100

Table 4 shows that more than half of the respondents, or 31 mothers (58.5%) in the working area of The Blega Health Center exclusively breastfeed until the baby's age is 6 months. Exclusive breastfeeding is the fulfillment of a baby's nutrition for 6 months without the addition of other foods or drinks. Exclusive means breast milk is the only source of intake for infants born up to the age of half a year without giving other intake, such as milk replacement, rice, bananas, and mineral water[12,17]. Lawrence Green said that the implementation of exclusive breastfeeding was related to predisposing factors, namely age, belief, work, physical condition, and bonding attachment, the possible factors and infrastructure, and EIBF, and the driving factors, namely family assistance and labor assistance in the health sector[5–8].

In the researcher's opinion, more than half of the mothers who practice exclusive breastfeeding are within the reproductive age range of 20–35 years. At this stage, mothers generally have better physical and emotional readiness. They are more capable of facing challenges during the breastfeeding process and are more consistent in providing exclusive breastfeeding for six months. A mother's level of education also contributes significantly to the success of exclusive breastfeeding. Mothers with higher education tend to have a better understanding of exclusive breastfeeding and its benefits for both mother and baby. They are more critical when facing breastfeeding-related issues and are more likely to seek solutions that are safe for both themselves and their infants.

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Experience also plays an important role. Multiparous mothers, having learned from previous experiences, are more likely to avoid repeating past mistakes such as not breastfeeding exclusively. Furthermore, mothers who are not employed have certain advantages in terms of time and energy. Without work obligations, they are free to breastfeed whenever needed, which increases the likelihood of successfully practicing exclusive breastfeeding. Health workers also play a crucial role in facilitating the implementation of exclusive breastfeeding. Postpartum mothers and their newborns can immediately seek guidance and consultation from health professionals when they encounter problems or difficulties during the breastfeeding process.

3.5. The Relationship Between EIBF and Bonding Attachment with Exclusive Breastfeeding

Table 5. The relationship between EIBF with exclusive breastfeeding at The Blega health center

EIBF	Exclusive breastfeeding				Total		P Value
	Exclusive breastfeeding		Not Exclusive breastfeeding				
	f	%	f	%	f	%	
EIBF	26	70.3	11	29.7	37	100	
Not EIBF	5	31.2	11	68.8	16	100	0.019
Total	31		22		53	100	
Contingency Coefficient	0.342						

Table 6. The relationship between bonding attachment with Exclusive breastfeeding at The Blega Health Center

Bonding Attachment	Exclusive breastfeeding				Total		P Value
	Exclusive breastfeeding		Not Exclusive breastfeeding				
	f	%	f	%	f	%	
Bonding Attachment	29	72.5	11	27.5	40	100	
No Bonding Attachment	2	15.4	11	84.6	13	100	0.001
Total	31		22		53	100	
Contingency Coefficient	0.446						

Table 5 shows the value of P-Value 0.009 using the chi-square test so that there is an H1 reception which proves there is a relationship between early breastfeeding initiation and exclusive breastfeeding. Research by Novita in 2022 states that early breastfeeding initiation is related to the exclusive breastfeeding process. Same with research by Hidayah (2024) and Hayati (2022), which also states the interrelationship of early breastfeeding initiation and exclusive breastfeeding[9,18,19].

Table 6 shows the value of P-Value 0.001 using the chi-square test so that there is an H1 reception that proves the relationship between bonding attachments with exclusive breastfeeding. Studies by Kim, Smith and Teti (2024), explained that the duration of breastfeeding mothers intersects with bonding attachments between mothers and their babies[10].

The results of the contingency coefficient test determine the closeness of the relationship between variables in the relationship of early breastfeeding initiation and exclusive breastfeeding are found to be a weak category, whereas the relationship of bonding attachments with exclusive breastfeeding are found in the medium category. In accordance with research by Rosfiantini (2024), most of the EIBF implementing mothers or not, carry out the exclusive breastfeeding process, and the implementation of exclusive breastfeeding is related to several other factors, namely the mother's knowledge, breastfeeding experience, and mature reproductive age[20].

Researchers argue that exclusive breastfeeding is more strongly associated with bonding attachment than with early breastfeeding initiation. Although EIBF is considered a crucial step in promoting exclusive breastfeeding, the analysis in this study found that EIBF alone was not a determining factor. Bonding attachment, which reflects sustained emotional closeness, has a greater influence because it is built through daily interaction between mother and child. In contrast, EIBF refers only to the activities occurring immediately after birth. Some mothers who did not perform EIBF may still initiate breastfeeding later and develop strong emotional bonds that support successful exclusive breastfeeding.

According to Latifah (2018) Mother's emotional feelings are related to the removal of the hormone oxytocin. Mothers who feel happy, loved, calm and relaxed can facilitate the expenditure of breast milk[21]. The posterior pituitary produces the hormone oxytocin due to direct touch with the mother's nipples and the baby's voice and how the mother's

feelings for the baby make contractions in the epithelial cells around the alveoli and push milk into the lactiverus duct. The process of removing milk is known as a letdown reflex[11].

Based on both theoretical and empirical findings, researchers assume that bonding attachment has a significant relationship with the implementation of exclusive breastfeeding. The anticipation and joy of pregnancy prepare mothers to welcome their baby with affection, which stimulates oxytocin and facilitates milk production. Strong bonding attachment also fosters a deep emotional connection from an early stage, which can influence the mother's breastfeeding behavior and her commitment to continue exclusive breastfeeding for the first six months.

4. CONCLUSION

More than half of mothers in the working area of The Blega Health Center carry out early breastfeeding initiation, most mothers have a bonding attachment with their babies, and more than half of mothers carry out exclusive breastfeeding. The results of the analysis found there was a relationship between early breastfeeding initiation and exclusive breastfeeding in the weak category, and there was a relationship between bonding attachments and exclusive breastfeeding in the medium category.

This study implies that both EIBF and bonding attachment are important in supporting exclusive breastfeeding. These should be supported by health workers through targeted education and postnatal mentoring. It is recommended that health institutions integrate EIBF and bonding practices into maternal care protocols. The government should strengthen exclusive breastfeeding efforts through regulations and professional training. Future research should involve larger samples and test intervention models to improve exclusive breastfeeding outcomes.

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REFERENCES

[1] Kementrian Kesehatan RI. Profil Kesehatan Indonesia Tahun 2023. 2024.
[2] Mena-Tudela D, Soriano-Vidal FJ, Vila-Candel R, Quesada JA, Martínez-Porcar C, Martin-Moreno JM. Is Early Initiation of Maternal Lactation a Significant Determinant for Continuing Exclusive Breastfeeding up to 6 Months? Int J Environ Res Public Health. 2023;20(3184):1–11.
[3] A'yun FQ, Budiarti Y, Astiriyani E. Hubungan Inisiasi Menyusui Dini (IMD) Dengan Keberhasilan Pemberian Asi Eksklusif Pada Ibu yang Memiliki Bayi Usia 7-12 Bulan di Puskesmas Tanjungsari Kabupaten Sumedang Tahun 2020. J Midwifery Inf. 2021;2(1):114–27.
[4] Dinas Kesehatan Provinsi Jawa Timur. Profil Kesehatan Provinsi Jawa Timur Tahun 2023. Dinkes Jatim (Surabaya). Surabaya: Dinkes Jatim; 2024.
[5] Purwoastuti TE, Walyani ES. Perilaku & Softskills Kesehatan: Panduan untuk Tenaga Kesehatan. Yogyakarta: Pustaka Baru Press; 2019.
[6] Santoso H, Estuti W, Anwar MC, Sulistiyono P, Rahayu D. Laju insiden Gagal ASI Eksklusif Di Masyarakat Nelayan Pada Masa Pandemi Covid-19. AcTion Aceh Nutr J. 2023;8(1):1–9.
[7] Hanum P, Rita S, Samra SZ, Ginting S, Wahyuni S, Sari TP, et al. Pengaruh Menggendong Metode M Shape Dengan Bonding Attachment Dan Kualitas Tidur Bayi. Mahesa Malahayati Heal Student J. 2024;4(2):709–17.
[8] Rahmadani E, Sutrisna M. Hubungan Breastfeeding Self Efficacy Ibu Terhadap Keberhasilan ASI Eksklusif Bayi di Wilayah Puskesmas Kandang Kota Bengkulu. J Ners. 2022;6(2):64–9.
[9] Novita E, Murdiningsih M, Turiyani T. Faktor-Faktor yang Mempengaruhi Pemberian ASI Ekslusif di Desa Lunggaian Kecamatan Lubuk Batang Kabupaten OKU Tahun 2021. J Ilm Univ Batanghari Jambi. 2022;22(1):157–65.
[10] Kim CY, Smith NP, Teti DM. Associations Between Breastfeeding, Maternal Emotional Availability, and Infant–Mother Attachment: The Role of Coparenting. J Hum Lact. 2024;40(3):455–63.
[11] Yunitasari E, Boa GF, Kusuma A, Widyastuti R, Panjaitan EA. ASI Eksklusif (Stimulasi Produksi ASI dan Keberhasilan MengASIhi). Jawa Tengah: CV. Amerta Media; 2023.
[12] Widiartini IAP. Inisiasi Menyusui Dini & Asi Eksklusif. Yogyakarta: Darul Hikmah; 2017.
[13] Regina E, Kiftia M, Ardhia D. Gambaran Pengetahuan dan Sikap Ibu Hamil tentang Inisiasi Menyusu Dini di Puskesmas Krueng Barona Jaya. JIM Fkep. 2024;8(4):20–8.
[14] Sutanto AV. Asuhan Kebidanan Nifas dan Menyusui: Teori dalam Praktik Kebidanan Profesional. Yogyakarta: Pustaka Baru Press; 2018.
[15] Italia, Sari EN. Faktor-Faktor Yang Berhubungan Dengan Bounding Attachment Pada Masa Nifas. J Keperawatan Merdeka. 2022;2(1):36–45.
[16] Rahmawati A, Warsini S, Lismidiati W. Faktor - faktor yang memengaruhi Bonding Attachment pada Ibu Post Partum. J Keperawatan. 2022;20(2):40–50.
[17] Rijanto, Astuti Setiyani, Sukesi, Ervi Husni, Queen Khoirun Nisa' Mairo, Dwi Purwanti, et al. Pelatihan Kader Dalam Peningkatan Cakupan ASI Eksklusif Melalui Kelompok Pendukung ASI di Wilayah Puskesmas Pacarkeling Kecamatan Tambaksari Kota Surabaya. Int J Community Serv Learn. 2023;7(1):103–11.

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[18] Hidayah N, Zurhayati. Hubungan Inisiasi Menyusu Dini (Imd) Dengan Pemberian Asi Eksklusif Pada Bayi Usia 0-6 Bulan. J Kesehat Tambusai. 2024;5(2):3068–73.
[19] Hayati N, Rumapea JP. Hubungan Inisiasi Menyusui Dini (IMD) Dengan Kelancaran Produksi Asi Pada Ibu Post Partum Di Posyandu Desa Bangun Sari Baru Tanjung Morawa Tahun 2021. Jidan (Jurnal Ilm Kebidanan). 2022;2(1):43–9.
[20] Rosfiantini M, Fatmaningrum W, Ningtyas WS. Hubungan Inisiasi Menyusu Dini Terhadap Pemberian ASI Eksklusif. J Ilm Univ Batanghari Jambi. 2024;24(2):1002–6.
[21] Widayanti AF. Peran SDGs dalam Meningkatkan Kesehatan dan Kesejahteraan Masyarakat. Bantul: CV. Mitra Edukasi Negeri; 2023.