



The Effectiveness of Counseling on Exclusive Breastfeeding Practices for Mothers in Makassar City: A Quasi-Experimental Study

Azrida M^{1*}, Yusrah Taqiyah²

¹ Midwifery Study Program, Faculty of Public Health, Muslim University of Indonesia, Indonesia

² Nursing Science Study Program, Faculty of Public Health, Muslim University of Indonesia, Indonesia

* **Correspondence Address:** azrida.machmud@umi.ac.id

Article Info

Article History

Received: May 25, 2025

Revised: Jul 28, 2025

Received: Aug 12, 2025

Keywords:

Counseling,

Exclusive

Breastfeeding,

Maternal

ABSTRACT

Breastfeeding is essential for infant health and development, yet its success is influenced by maternal knowledge and counseling support. This study aimed to analyze differences in breastfeeding among mothers who received counseling and those who did not before and after delivery. A quasi-experimental study with a two-group pre-posttest control group design was conducted at Masyita Maternity Hospital and Kassi-Kassi Primary Health Care Center, Makassar City, from September to December 2023. The population was pregnant women present during the study period, with a total sample of 56 respondents selected using purposive sampling, consisting of 28 in the intervention group and 28 in the control group. Data were analyzed using the Wilcoxon Signed Ranks Test and Mann-Whitney Test. The results showed a significant difference in maternal knowledge between the intervention and control groups ($p=0.038$). However, no significant differences were found in breastfeeding outcomes at the first month ($p=0.164$) and the second month postpartum ($p=0.279$). These findings indicate that although counseling improved maternal knowledge, breastfeeding success was achieved in both groups due to their generally good knowledge. Intensive counseling during the third trimester, continued with postnatal support through home visits and information provision up to six months postpartum, is essential to optimize exclusive breastfeeding achievement.

INTRODUCTION

The benefits of breast milk are widely known. Breast milk is the perfect and best food for babies, because it contains complete nutrients for the baby's needs. However, the achievement of exclusive breastfeeding is still far from the target. The causes of the low coverage of exclusive breastfeeding are the lack of knowledge of mothers, families and communities about the importance of breast milk, the correct way to breastfeed, the lack of lactation counseling services and support from health workers, socio-cultural perceptions that oppose breastfeeding, inadequate conditions for working mothers (too short maternity leave, lack of space in the workplace for breastfeeding or pumping breast milk), and aggressive marketing by formula companies that not only affect mothers, but also health workers (Kemenkes RI, 2018). The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) made a declaration known as the Innocenti Declaration. This

declaration aims to promote and provide support for breastfeeding. This declaration is based on scientific evidence about the benefits of breast milk for the baby's immune system, growth and development (Anand, 2013).

Based on Riskesdas data, it shows that 37.3% of infants aged 0-5 months received exclusive breastfeeding in the last 24 hours, 9.3% received partial breastfeeding, and 3.3% received predominantly breastfeeding. The highest coverage of exclusive breastfeeding by province in Indonesia is Bangka Belitung Province at 56.7%, while the lowest coverage is NTB Province at 20.3%. South Sulawesi Province is in 16th place at 38.0% (Kemenkes RI, 2018).

Based on the health profile of South Sulawesi province, the highest exclusive breastfeeding coverage is in Sidrap Regency at 93.92%, while the lowest is in Gowa Regency at 20.52%. Meanwhile, exclusive breastfeeding coverage in Makassar City is 72.43% (Profil Kesehatan Provinsi, 2016). One effort to increase the coverage of breastfeeding is to provide health education to pregnant women in the third trimester and continue for 6 months after giving birth and during the weaning period.

Support and counseling should be provided routinely during pregnancy to prepare for early breastfeeding initiation and during the postpartum period to ensure successful breastfeeding. Mothers and caregivers who are unfamiliar with breastfeeding need counseling and support as an alternative to breastfeeding (Anand, 2013). Research by Monika et al. found that breastfeeding methods influence a mother's success. Counseling provided by healthcare workers, both nurses and midwives, provides support and guidance while the mother is breastfeeding, ensuring that the mother experiences no problems, is motivated to breastfeed, and increases her confidence (Djogo et al., 2022). Mothers and caregivers with insufficient knowledge about breastfeeding can turn to counseling and support as an alternative strategy for improving breastfeeding practices. Studies indicate that breastfeeding counseling contributes to a mother's effectiveness in nurturing her baby through breastfeeding. (Mariani et al., 2019). Another study conducted by Azrida in 2021 found that there was a significant influence on plans for exclusive breastfeeding in working mothers before and after counseling.

Based on preliminary data, 73 pregnant women were obtained at Masyita Hospital for Women and Children (RSIA Masyita) for 3 months. Based on a preliminary survey conducted by the researcher and the results of interviews, of the 8 mothers, 5 understood breastfeeding and 3 did not understand the concept of exclusive breastfeeding and breastfeeding. Based on this background, the researcher was interested in conducting research on breastfeeding counseling for mothers.

METHODS

The study was conducted over an eight-month period. The research method used was a quasi-experimental study with a two-group pretest-posttest with control group design. This study was conducted by administering a pretest (initial observation) regarding breastfeeding plans. Afterward, the intervention group received prenatal counseling and counseling until the second month postpartum, followed by a posttest (final observation). The control group received a pretest (initial observation) regarding breastfeeding plans, after which they continued to observe breastfeeding until the second month postpartum (S, 2015). The

population in this study was all pregnant women attending Masyita Hospital and PKM Kassi-Kassi at the time of the study. The sample was drawn using purposive sampling, with sampling based on certain considerations.

The inclusion criteria for this study were:

- a) Pregnant women in their third trimester who were willing to participate and were healthy
- b) No communication disorders (able to read and write)

Exclusion criteria

Pregnant women in their third trimester who were unable to participate in counseling due to urgent needs. The sample size was 56 respondents, consisting of 28 in the intervention group and 28 in the control group. Data were processed using SPSS with the Wilcoxon Signed Ranks Test and the Mann-Whitney Test for statistical evaluation.

RESULTS

Table 1. Respondent Distribution Based on Mothers' Characteristics in Makassar City

Variable		Intervention Group		Group Control	
		n	%	n	%
Age (years)	<20	3	10,7	3	10,7
	20 - 29	14	50,0	8	28,6
	>30	11	39,3	17	60,7
Educational Level	Elementary School	4	14,3	0	0,0
	Junior High School	7	25,0	3	10,7
	Senior High School	14	50,0	10	35,7
	Associate Degree (D.III)	1	3,6	2	7,1
	Bachelor's Degree (Strata 1)	2	7,1	4	14,3
	Master's Degree (Strata 2)	0	0,0	9	32,1
Occupation Categories	Worker	1	3,6	0	0
	Housewife	26	92,9	14	50,0
	Private Employes	1	3,6	13	46,4
	Government Employes	0	0	1	3,6
Parity	Primipara	0	0	2	7,2
	Multipara	28	100	26	92,8
Total		28	100	28	100

Source: Primary Data, 2023

Table 2. Distribution of Respondents Based on Breastfeeding Plans and Mother's Knowledge

Variable		Intervention Group		Control Group	
		n	%	n	%
Breastfeeding Plan	Yes	26	92,9	24	85,7
	No	2	7,1	4	14,3
Mother's Knowledge	Good	18	64,3	10	35,7
	Enough	10	35,7	18	64,3

Total	28	100	28	100
-------	----	-----	----	-----

Source: Primary Data, 2023

Table 4. Distribution of Respondents Based on the Success of Postpartum Breastfeeding

Postpartum Breastfeeding	Intervention Group				Control Group				Total	
	No		Yes		No		Yes			
	n	%	n	%	n	%	n	%	n	%
1 st Month	1	3,6	27	96,4	4	14,3	24	85,7	28	100
2 nd Month	1	3,6	27	96,4	6	21,4	22	78,6	28	100

Source: Primary Data, 2023

As per the data presented in Table 4, it is indicated that 27 mothers (96.4%) from the intervention group initiated breastfeeding within the first month post-delivery, contrasting with 24 mothers (85.7%) in the control group. Moreover, only 1 mother (3.6%) from the intervention group opted not to breastfeed, while the control group consisted of 4 mothers (14.3%) who did not engage in breastfeeding. Moving to the second month post-delivery, 27 mothers (96.4%) in the intervention group continued breastfeeding, whereas 22 mothers (78.6%) in the control group did the same. Notably, 4 mothers (14.3%) from the intervention group and 6 mothers (21.4%) from the control group did not partake in breastfeeding during this period.

Table 5. Distribution of variations in pre-test and post-test knowledge within the intervention group.

Mother's Knowledge	Pre-Test		Post-Test		<i>p-Value</i>
	n	%	n	%	
Good	10	35,8	28	100	0,002
Enough	18	4,2	0	0	
Total	28	100	28	100	

Source: Primary Data, 2023

As indicated in Table 5, the paired sample t-test calculations yielded a p-value of 0.002. This result, where p-value is less than 0.05, suggests a significant difference in knowledge between the intervention group mothers in the pre-test and post-test.

Table 6. Presents the distribution of Mann-Whitney Test results, which assess differences in counseling between the intervention group and the control group.

Variable		Sample Group	n	Mean Rank	Sum of Ranks	<i>p-value</i>
Mother's Knowledge		Intervention	28	33,00	924,00	0,038
		Control	28	24,00	672,00	
Postpartum Breastfeeding	1 st Month	Intervention	28	30,00	840,00	0,164
		Control	28	27,00	756,00	
	2 nd Month	Intervention	28	30,00	840,00	0,279
		Control	28	27,00	756,00	

Examining Table 6, the Mann-Whitney test results illustrate a noteworthy difference in mothers' knowledge between the intervention and control groups, as indicated by a p-value of 0.038. However, when it comes to breastfeeding practices during the 1st month (p-value = 0.164) and 2nd month (p-value = 0.279) post-delivery, the p-values surpassed 0.05, indicating an absence of significant difference.

DISCUSSION

Responden in this study were pregnant women in the third trimester, and were divided into control and intervention groups. The intervention group received counseling once before delivery and continued twice after delivery for two months after delivery. Counseling is a process of exchanging information and positive interactions between clients and providers to help clients identify their needs, choose the best solution, and make decisions that best suit their circumstances. Exclusive breastfeeding is very important because it has many benefits for babies and mothers, as well as complete and easily digestible nutritional content. One effort to increase the coverage of breastfeeding is through counseling/promotion of exclusive breastfeeding from an early age to pregnant women in their third trimester, so that mothers are better prepared to provide breast milk as early as possible without providing food or drink. The implementation of exclusive breastfeeding has been regulated by Government Regulation Number 33 of 2012, which is breast milk given to babies from birth for six months, without adding and/or replacing it with other foods or drinks, except for medicines, vitamins, and minerals. However, the achievement of exclusive breastfeeding is still far from the target (Peraturan Pemerintah Republik Indonesia, 2012).

This study showed that there was no significant difference in breastfeeding in the first and second months after delivery in the intervention group and the control group. Although there was no significant difference, there was a difference in mothers who continued to breastfeed in the intervention group and the control group, where in the intervention group only 1 mother did not breastfeed in the first and second months after delivery, while in the control group in the first month there were 4 mothers who did not breastfeed and in the second month it increased to 6 mothers who did not breastfeed.

In the intervention group, maternal knowledge was found to have a p-value of 0.002, meaning there was a significant difference in the pre-test and post-test of maternal knowledge about breastfeeding. The average knowledge of mothers in the intervention group was in the good category. In this study, it was found that the results of maternal knowledge obtained through questionnaires still had many mothers who answered questions about the benefits of breast milk incorrectly, the process of storing breast milk, how to thaw breast milk incorrectly, and also breastfeeding techniques that were not understood. So after being given counseling, maternal knowledge changed and increased. Knowledge is an important factor in helping the successful implementation of exclusive breastfeeding. The results of Lystyaningrum's research show that mothers who do not provide exclusive breastfeeding to their babies are due to the mothers not understanding the benefits of providing breastfeeding (Listyaningrum & Vidayanti, 2016). And results of research conducted by Muffidah et al. from 2 groups (control and experiment) with a sample size of 29 samples each showed that

breastfeeding counseling during pregnancy increased knowledge about exclusive breastfeeding (Mufiddah et al., 2016).

There was no significant difference in the success of breastfeeding in the first month after giving birth between the intervention group and the control group. This difference was not observed because the average knowledge of both groups was good. Knowledge is crucial for supporting breastfeeding. Knowledge is crucial to support breastfeeding. Research by Angel et al. shows that respondents with good knowledge significantly influence their direct breastfeeding of their babies (Deafira et al., 2017). In the control group, counseling was not provided, but on average, the mothers were able to provide breast milk. This was because, in addition to the mothers' good knowledge, it was also supported by the education of many of the mothers who were university graduates, where this education is one of the factors in the success of providing breast milk. Research from Zulmelisa stated that from 59 samples, it was found that mothers who had less knowledge about exclusive breastfeeding were 10 times more likely to not provide exclusive breastfeeding compared to mothers with good knowledge, mothers with low education were 3 times more likely to not provide exclusive breastfeeding compared to mothers with higher education (Rasyid & Megawati, 2016). In addition, in the control group there were also many multiparous mothers, where multiparous mothers were considered to have understanding and knowledge about breastfeeding because they had previous experience.

In the intervention group in the 1st month after giving birth, there was only 1 mother who had helped provide formula milk and in the control group there were 4 mothers who had helped provide formula milk. In this intervention group, breastfeeding by mothers was very good because the mothers' knowledge was generally in the good category and counseling about breastfeeding had also been provided in the third trimester of pregnancy so that the mothers were ready to breastfeed, and the researchers continued to provide counseling for two months and provided support and space for discussion if there were any obstacles that they wanted to ask. Research by Nurfatimah et al. showed that intensive lactation counseling increased the number of mothers who exclusively breastfed. Statistical test results showed a difference in exclusive breastfeeding practices between the treatment and control groups ($p=0.034$). This difference was caused by increased knowledge and changes in attitudes in mothers who received intensive lactation counseling compared to mothers who did not receive intensive lactation counseling (Nurfatimah et al., 2019).

There was no significant difference in the success of providing exclusive breastfeeding in the 2nd month after delivery between the intervention and control groups. However, it can be seen that in the control group in the 2nd month, there were an increase to 6 mothers who helped with formula milk. From the results of interviews with mothers, it was found that mothers gave formula milk because they felt tired and could not only give breast milk because they had to take care of their other children, there were mothers who had to return to work. Research by Azrida et al. shows that there is a significant influence on plans to provide exclusive breastfeeding in working mothers before and after being given counseling. (Azrida M et al., 2023) Other research also states that providing breastfeeding counseling can increase the success of mothers in breastfeeding their babies (Mariani et al., 2019). In such circumstances, intensive counseling and support from the family, especially the husband, is

needed to provide support to his wife regarding breastfeeding so that the success of exclusive breastfeeding can be achieved. Although the average knowledge of mothers in the control group was in the good category, there were still mothers who were unsuccessful in providing breast milk and this continued to increase until the 2nd month after delivery. This becomes a problem if postpartum counseling is not provided, then it is feared that there will be an increase in mothers who do not breastfeed their babies so that the achievement of Exclusive Breastfeeding is not achieved. Research from Ria Ambarwati et al. showed statistical test results that there was a difference in the practice of exclusive breastfeeding between the treatment and control groups ($p = 0.0001$), this difference was caused by an increase in knowledge and changes in attitudes in mothers who received intensive lactation counseling compared to mothers who did not receive intensive lactation counseling (Lestari et al., 2018). There was a significant difference in the success of exclusive breastfeeding between the intervention group and the control group after counseling (p value $0.008 < 0.05$; RR 2.500). The success of breastfeeding in the intervention group was 22 respondents, while in the control group it was 10 respondents (Sutrisminah & Hudaya, 2020).

After giving birth is a critical period in breastfeeding. This happens because various problems related to breastfeeding arise. By providing breastfeeding counseling, it can help mothers to increase their confidence and ability to deal with problems in breastfeeding. According to researchers, providing breastfeeding counseling to mothers can help them cope with challenges and increase their confidence in breastfeeding. Intensive counseling should be provided for mothers up to six months after delivery, including home visits and information resources, to help achieve exclusive breastfeeding.

CONCLUSIONS

This study concludes that there is no significant difference in breastfeeding success between the intervention and control groups in the 1st and 2nd months post-delivery. Both groups demonstrated satisfactory breastfeeding practices. Underscoring the importance of knowledge and continuous counseling for third-trimester pregnant women and throughout the postnatal period remains crucial. Subsequent research could explore breastfeeding counseling extending from the postpartum phase until the baby reaches six months old.

ACKNOWLEDGEMENTS

Accompanied prayers and many greetings Thank You to The Chancellor of the Muslim University of Indonesia and the LP2S Institute who have support and facilitate research funding so that This research can walk in accordance with goals and hopes. Thanks also to party Masyita Maternity Hospital and Kassi-Kassi Primary Health Care Center who have contribute to the implementation this research.

REFERENCE

- Anand, R. (2013). Infant and Young Child Feeding. *IAP Textbook of Pediatrics*, 127-127. https://doi.org/10.5005/jp/books/11894_132
- Azrida M, Jama, F., & Thamrin, H. (2023). *Konseling untuk Mewujudkan Rencana Pemberiaan*

- ASI Eksklusif pada Ibu Bekerja dalam Kehamilan Trimester III. *Jurnal Penelitian Kesehatan Suara Forikes*, 14(3), 534-537. <http://forikes-ejournal.com/index.php/SF>
- Deafira, A., Wilar, R., & Kaunang, E. D. (2017). Faktor yang Memengaruhi Keberhasilan Pemberian Asi pada Bayi yang Dirawat pada Beberapa Fasilitas Kesehatan di Kota Manado. *E-CliniC*, 5(2). <https://doi.org/10.35790/ecl.5.2.2017.18524>
- Djogo, M. H. A., Wuladari, T. M., & Letor, Y. M. K. (2022). Pengaruh Konseling ASI Eksklusif terhadap Motivasi Ibu Menyusui di Ruang Nifas RSUD S.K. Lerik di Kota Kupang. *Jurnal Ilmiah Obsginllmiah Obsginl*, 14(2), 77-85.
- Kemenkes RI. (2018). *Hasil Utama Riskesdas*.
- Lestari, L., Widyawati, M. N., & Admini, A. (2018). Peningkatan Pengeluaran Asi Dengan Kombinasi Pijat Oksitosin Dan Teknik Marmet Pada Ibu Post Partum (Literatur Review). *Jurnal Kebidanan*, 8(2), 120. <https://doi.org/10.31983/jkb.v8i2.3741>
- Listyaningrum, T. U., & Vidayanti, V. (2016). Tingkat Pengetahuan dan Motivasi Ibu Berhubungan dengan Pemberian ASI Eksklusif pada Ibu Bekerja. *Jurnal Ners Dan Kebidanan Indonesia*, 4(2), 55. [https://doi.org/10.21927/jnki.2016.4\(2\).55-62](https://doi.org/10.21927/jnki.2016.4(2).55-62)
- Mariani, M., Sunanto, S., & Wahyusari, S. (2019). Pendampingan dan Konseling ASI Berpengaruh terhadap Pengetahuan, Motivasi dan Perilaku Ibu dalam Menyusui. *Jl-KES (Jurnal Ilmu Kesehatan)*, 3(1), 34-39. <https://doi.org/10.33006/ji-kes.v3i1.129>
- Mufiddah, I., Paramastri, I., Agung Wibowo, T., Perilaku Kesehatan, D., dan Kedokteran Sosial, L., Kedokteran, F., Gadjah Mada, U., Mada, G., & Kesehatan Provinsi Yogyakarta, D. (2016). Efektivitas Konseling untuk Meningkatkan ASI eksklusif pada Ibu Hamil di Tenggara, Kutai Kartanegara Effectiveness of counseling to increase exclusive breastfeeding practice among pregnant women in Tenggara, Kutai Kartanegara. *Berita Kedokteran Masyarakat*, 133-138.
- Nurfatimah, N., Entoh, C., & Ramadhan, K. (2019). Pengaruh Konseling Laktasi Terhadap Pemberian Asi Eksklusif Di Wilayah Kerja Puskesmas Mapane Kabupaten Poso. *Jurnal Publikasi Kesehatan Masyarakat Indonesia*, 6(1), 1-6. <https://doi.org/10.20527/jpkmi.v6i1.6869>
- Peraturan Pemerintah Republik Indonesia. (2012). *Pemberian Air Susu Ibu Eksklusif*.
- Profil Kesehatan Provinsi. (2016). *Profil Kesehatan Provinsi Sulawesi Selatan*.
- Rasyid, Z., & Megawati, A. (2016). Faktor-Faktor Yang Berhubungan Dengan Pemberian Asi Eksklusif Pada Bayi Di Wilayah Kerja Puskesmas Senapelan Kota Pekanbaru Tahun 2016. *Photon: Jurnal Sain Dan Kesehatan*, 7(01), 49-56. <https://doi.org/10.37859/jp.v7i01.562>
- S, N. (2015). *Metode Penelitian Kesehatan*. PT. Rineka Cipta.
- Sutrisminah, E., & Hudaya, I. (2020). Pengaruh Konseling Laktasi Intensif Terhadap Keberhasilan Pemberian Air Susu Ibu (ASI) Eksklusif Sampai 6 Bulan Di Kelurahan Kudu Kecamatan Genuk Kota Semarang. *INVOLUSI: Jurnal Ilmu Kebidanan*, 10(1), 13-16. <http://www.ejournal.stikesmukla.ac.id/index.php/involusi/article/view/135>