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The Effect of Lactation Education on Increasing Knowledge of Breastfeeding Mothers at Manembo-Nembo Hospital, Bitung City

Philia Phoebe Pangandaheng[1], Reny Retnaningsih[2*]
[1-2]Undergraduate Midwifery Study Program, Faculty of Health Sciences, Institut Teknologi Sains dan Kesehatan Rs. dr. Soepraoen Malang, Indonesia
**Author Correspondence: r enyretna@itsk-soepraoen.ac.id*

Abstract. *Breastfeeding success is greatly influenced by the mother's level of knowledge, especially during the early postpartum period, which is a crucial adaptation phase in the lactation process. Lactation education is a strategic intervention to improve mothers' understanding of the benefits of breast milk, proper breastfeeding techniques, and management of lactation problems. This study aims to analyze the effect of lactation education on improving mothers' knowledge of breastfeeding at Manembo-Nembo Hospital, Bitung City. This study used a quasi-experimental design with a one-group pretest–posttest approach. The study sample consisted of 30 mothers selected using a purposive sampling technique. Knowledge levels were measured before and after lactation education using a structured questionnaire. The lactation education intervention was delivered through interactive lectures, discussions, and demonstrations of breastfeeding techniques. Data were analyzed univariately and bivariately using the Wilcoxon Signed Rank Test with a significance level of $p < 0.05$. The results showed an increase in mothers' knowledge after lactation education. The distribution of knowledge levels shifted to the better category, and the Wilcoxon test results showed a significant difference between knowledge scores before and after the intervention ($p < 0.05$). The conclusion of this study indicates that lactation education significantly improved maternal breastfeeding knowledge. Lactation education can be used as an effective intervention in postpartum care in hospitals to support successful breastfeeding and improve the quality of midwifery care.*

Keywords: *Breast Milk; Breastfeeding Knowledge; Hospital; Lactation Education; Postpartum Mothers.*

1. INTRODUCTION

Breastfeeding is one of the most effective and low-cost public health interventions for improving maternal and infant health. The World Health Organization (WHO) and UNICEF recommend early initiation of breastfeeding within the first hour of life, exclusive breastfeeding for the first six months, and continued breastfeeding up to two years of age or beyond with adequate complementary feeding (WHO & UNICEF, 2021). These recommendations are based on strong scientific evidence that breast milk provides protection against infectious diseases, supports cognitive development, and reduces the risk of non-communicable diseases later in life. For mothers, breastfeeding contributes to postpartum recovery and a reduced risk of breast and ovarian cancer (Victora et al., 2016; Rollins et al., 2016). Despite the widely documented benefits of breastfeeding, achieving optimal breastfeeding practices globally remains elusive. The 2023 Global Breastfeeding Scorecard reported that the global prevalence of exclusive breastfeeding in infants aged 0–5 months reached approximately 48%, approaching the World Health Assembly target of 50% by 2025. However, significant disparities remain between countries and regions (UNICEF & WHO, 2023). This disparity demonstrates that breastfeeding success is not solely determined by biological factors or individual maternal motivation, but is also influenced by the quality of health services, family and community support, workplace

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policies, and access to adequate breastfeeding information and counseling (Pérez-Escamilla et al., 2017; Rollins et al., 2016).

Clinically, successful breastfeeding is the result of a complex interaction between physiological and psychological factors. Milk production and release depend on adequate breast stimulation through the infant's suckling, which triggers the release of the hormones prolactin and oxytocin. However, maternal behavioral and cognitive factors, particularly knowledge, self-efficacy, and readiness to face the initial challenges of breastfeeding, often determine the sustainability of breastfeeding practices (Dennis, 2015). Within the framework of health behavior change theory, knowledge plays a crucial role in shaping health attitudes and practices, including the mother's ability to recognize the benefits of breastfeeding, understand proper breastfeeding techniques, and address common lactation problems in the early postpartum period (Bandura, 1997; Otsuka et al., 2018). Several studies over the past decade have demonstrated that lactation education and counseling are effective interventions in improving breastfeeding knowledge and practices. A systematic review by McFadden et al. (2017) reported that breastfeeding support provided by trained health workers, both antenatally and postnatally, significantly increases breastfeeding initiation rates and the continuation of exclusive breastfeeding. Other studies have shown that structured lactation education can improve mothers' understanding of lactation management, increase confidence in breastfeeding, and reduce the perception of insufficient breast milk, which is often the reason for early cessation of breastfeeding (Skouteris et al., 2016; Nair et al., 2020).

In the context of healthcare, hospitals play a strategic role as the starting point for establishing breastfeeding behavior. The WHO emphasizes the importance of implementing *the Ten Steps to Successful Breastfeeding* through the *Baby-Friendly Hospital Initiative* (BFHI) as a standard of care that supports successful breastfeeding (WHO & UNICEF, 2018). One of the main components of these ten steps is providing effective breastfeeding education and counseling to mothers, both before and after delivery. Lactation education in hospitals is crucial because the early postpartum period is a vulnerable adaptation phase, where mothers often experience pain, fatigue, anxiety, and technical difficulties in breastfeeding (Jaafar et al., 2016). In Indonesia, breastfeeding achievement shows varying trends depending on the indicators used. The 2023 Indonesian Health Survey (SKI) reported that the proportion of children aged 6–23 months who received exclusive breastfeeding for six months reached 55.5% nationally, with significant variation across provinces (Ministry of Health, 2023). Meanwhile, the indicator for infants aged 0–5 months who receive exclusive breastfeeding shows a relatively higher figure, as reported by the Central Statistics Agency and other Ministry of Health sources,

referring to the 2022 SDKI (BPS, 2023; Ministry of Health, 2022). This difference in indicators indicates that the main challenge is not only breastfeeding initiation, but maintaining exclusive breastfeeding practices for the full six months.

Several studies in Indonesia have identified that maternal knowledge is a key determinant of breastfeeding success, alongside education, employment, family support, and the role of health workers (Sari et al., 2019; Prasetyo et al., 2021). However, most of these studies focus on exclusive breastfeeding practices as the final outcome, while empirical evidence regarding the effectiveness of lactation education on improving maternal breastfeeding knowledge in healthcare facilities, particularly regional hospitals, remains limited. Furthermore, sociocultural variations and regional characteristics demand contextual evidence to support improvements in the quality of breastfeeding services based on local needs. Based on this description, a relevant *research gap exists* : the lack of studies specifically evaluating the effect of lactation education on improving maternal breastfeeding knowledge in hospital settings in Indonesia. Knowledge is an important *intermediate outcome* because it serves as the foundation for long-term changes in breastfeeding attitudes and practices. Therefore, this research is scientifically and practically important to support the strengthening of integrated breastfeeding education programs within hospital services. This study aims to analyze the effect of lactation education on increasing the knowledge of breastfeeding mothers at Manembo- Nembo Hospital, Bitung City, as a basis for developing more effective breastfeeding education interventions to support the success of exclusive breastfeeding in Indonesia.

2. RESEARCH METHOD

Research design

This study used a quasi-experimental design with a one-group pretest–posttest approach, which aimed to assess changes in mothers' knowledge levels about breastfeeding before and after receiving lactation education. This design was chosen because it allows for evaluation of the effectiveness of educational interventions in real-life healthcare settings without a control group and is appropriate for educational intervention research in healthcare facilities.

Location and Time of Research

The study was conducted at Manembo-Nembo Hospital in Bitung City, North Sulawesi, a referral hospital providing maternal and neonatal services. Data collection took place from January to March 2024, encompassing pretests, lactation education, and posttest measurements.

Research Population and Sample

The population in this study was all breastfeeding mothers who underwent postpartum care or postpartum check-ups at Manembo-Nembo Hospital in Bitung City during the study period. The study sample consisted of 30 breastfeeding mothers, selected using a purposive sampling technique based on inclusion criteria: mothers who were willing to respond, able to communicate well, and in stable health. Exclusion criteria included mothers with severe medical complications that hindered breastfeeding.

Research Variables

The independent variable in this study was lactation education, while the dependent variable was the level of knowledge of breastfeeding mothers. Lactation education was defined as providing structured information about the benefits of breastfeeding, proper breastfeeding techniques, lactation management, and handling breastfeeding problems. Knowledge level was measured based on respondents' scores on a breastfeeding knowledge questionnaire.

Research Instruments

The instrument used in this study was a breastfeeding knowledge questionnaire developed based on current literature and lactation guidelines. The questionnaire consisted of multiple-choice and true-false questions covering aspects of the benefits of breastfeeding, breastfeeding techniques, frequency and duration of breastfeeding, and management of lactation problems. The instrument was tested for validity and reliability before use in the study, making it suitable for objectively measuring the level of breastfeeding knowledge.

Research Procedures

The research procedure began with an explanation to respondents and the acquisition of written *informed consent.* Next, respondents completed a pretest questionnaire to assess their initial knowledge. The intervention, in the form of lactation education, was then delivered directly by the researcher using interactive lecture and discussion methods, accompanied by leaflets and demonstrations of breastfeeding techniques. The education lasted approximately 30–45 minutes. After the intervention, respondents completed a posttest questionnaire to assess changes in their knowledge levels following the education.

Data Analysis

The data obtained were analyzed using univariate and bivariate analyses. Univariate analysis was used to describe the characteristics of respondents and the distribution of knowledge levels of breastfeeding mothers before and after education. Bivariate analysis was conducted to determine differences in knowledge levels before and after the intervention using

the Wilcoxon Signed Rank Test, as the data were ordinal and not normally distributed. All data analyses were conducted with a statistical significance level of $p < 0.05$.

3. RESULTS AND DISCUSSION

Results

Respondent Characteristics

This section presents the characteristics of breastfeeding mothers who participated in the study at Manembo-Nembo Hospital in Bitung City. The characteristics analyzed included age, education level, employment status, and parity, aiming to provide a general overview of the respondents' profiles.

Table 1. Distribution of Characteristics of Breastfeeding Mothers at Manembo-Nembo Hospital, Bitung City (n = 30).

Characteristics	Category	n	%
Age (years)	< 20	3	10.0
	20–35	21	70.0
	> 35	6	20.0
Education	Elementary (Elementary–Middle School)	8	26.7
	Middle School (SMA)	15	50.0
	Higher Education (College)	7	23.3
Work	Housewife	18	60,0
	Bekerja	12	40,0
Paritas	Primipara	13	43,3
	Multipara	17	56,7

Based on Table 1, the majority of respondents were in the healthy reproductive age group of 20–35 years, amounting to 70.0%, while a small proportion were under 20 years old and over 35 years old. In terms of education, the majority of breastfeeding mothers had a secondary education (50.0%), followed by primary education and higher education. The majority of respondents were housewives (60.0%), while the remainder were working mothers. Based on parity, respondents were predominantly multiparous mothers (56.7%), although the proportion of primiparous mothers was also quite large. This figure indicates that respondents came from diverse age groups and social characteristics, which could potentially influence their level of knowledge and acceptance of lactation education.

Knowledge Level of Breastfeeding Mothers Before Lactation Education (Pretest)

This section presents an overview of the level of knowledge of breastfeeding mothers before receiving lactation education intervention at Manembo-Nembo Hospital in Bitung City.

The knowledge questionnaire covered aspects of the benefits of breast milk, breastfeeding techniques, lactation management, and handling breastfeeding problems.

Table 2. Distribution of Knowledge Level of Breastfeeding Mothers Before Lactation Education (Pretest) (n = 30).

Level of Knowledge	n	%
Not enough	14	46.7
Enough	10	33.3
Good	6	20.0
Total	30	100.0

Based on Table 2, the level of knowledge of breastfeeding mothers before receiving lactation education was mostly in the poor category, at 46.7%. A total of 33.3% of respondents had a sufficient level of knowledge, while only 20.0% of respondents had good knowledge. These findings indicate that before the intervention, almost half of breastfeeding mothers did not have an adequate understanding of lactation, including the benefits of breast milk, correct breastfeeding techniques, and managing breastfeeding problems. This condition indicates a clear need for lactation education to improve the knowledge of breastfeeding mothers in the hospital environment.

Level of Knowledge of Breastfeeding Mothers After Lactation Education (Posttest)

Wound condition assessment is based on clinical healing outcomes, including optimal wound adhesion, absence of signs of infection, and a dry, closed wound. This presentation aims to illustrate the clinical outcomes of perineal wound healing following intervention.

Table 3. Condition of Perineal Wounds After Green Betel Leaf Water Wash Intervention (n = 18).

Perineal Wound Conditions	n	%
Wound healed (optimal attachment, dry, no signs of infection)	18	100
The wound has not healed	0	0.0
Total	18	100

Based on Table 3, all postpartum mothers (100%) showed that their perineal wounds had healed after the green betel leaf water bath intervention. Clinically, the perineal wounds appeared dry, showed no signs of infection such as redness, edema, or discharge, and had achieved optimal tissue adhesion. No respondents were found with unhealed perineal wounds at the end of the monitoring period. These findings indicate that clinically, the green betel leaf water bath intervention was followed by improvements in the condition of the perineal wound, reaching the optimal healing stage.

Perineal Wound Healing Time

This section presents the level of knowledge of breastfeeding mothers after receiving a lactation education intervention at Manembo-Nembo Hospital in Bitung City. Measurements were conducted using the same instrument as the pretest to ensure consistency and accuracy in assessing changes in respondents' knowledge levels.

Table 4. Distribution of Knowledge Level of Breastfeeding Mothers After Lactation Education (Posttest) (n = 30).

Level of Knowledge	n	%
Not enough	3	10.0
Enough	9	30.0
Good	18	60.0
Total	30	100.0

Based on Table 3, after receiving lactation education, the majority of breastfeeding mothers were in the good knowledge category, at 60.0%. The proportion of respondents with sufficient knowledge reached 30.0%, while only 10.0% remained in the poor knowledge category. These results indicate a shift in the distribution of knowledge levels toward higher categories after the implementation of lactation education, as reflected in the increase in the number of respondents with good knowledge and a decrease in the number of respondents with poor knowledge.

Comparison of Knowledge Levels of Breastfeeding Mothers Before and After Lactation Education

This section presents a comparison of the knowledge levels of breastfeeding mothers before and after receiving lactation education at Manembo-Nembo Hospital in Bitung City. The comparison was conducted to illustrate changes in the distribution of respondents' knowledge levels following the lactation education intervention.

Table 5. Comparison of Knowledge Level of Breastfeeding Mothers Before and After Lactation Education (n = 30).

Level of Knowledge	Pretest n (%)	Posttest n (%)
Not enough	14 (46.7)	3 (10.0)
Enough	10 (33.3)	9 (30.0)
Good	6 (20.0)	18 (60.0)
Total	30 (100.0)	30 (100.0)

Based on Table 4, there was a change in the distribution of breastfeeding mothers' knowledge levels before and after lactation education. The number of respondents with poor knowledge decreased from 46.7% in the pretest to 10.0% in the posttest. Conversely, the proportion of respondents with good knowledge increased from 20.0% before the intervention to 60.0% after the intervention. Meanwhile, the proportion of respondents with adequate

knowledge remained relatively stable with a slight decrease. These changes indicate a shift in breastfeeding mothers' knowledge levels to a higher category after the lactation education.

Analysis of the Influence of Lactation Education on the Knowledge Level of Breastfeeding Mothers

This section presents the results of a statistical analysis to determine the effect of lactation education on the knowledge levels of breastfeeding mothers at Manembo-Nembo Hospital in Bitung City. The analysis was conducted by comparing knowledge scores before and after lactation education using the Wilcoxon Signed Rank Test, as the data were ordinal and not normally distributed.

Table 6. Results of the Wilcoxon Test on the Level of Knowledge of Breastfeeding Mothers Before and After Lactation Education (n = 30).

Variables	Median (Min–Max) Pretest	Median (Min–Max) Posttest	Z	p-value
Level of Knowledge	2 (1–3)	3 (2–3)	-4,215	0,000

Based on the Wilcoxon test results in Table 5, there was a significant difference between the knowledge levels of breastfeeding mothers before and after receiving lactation education. The median knowledge score increased from 2 in the pretest to 3 in the posttest. The statistical test results showed a p value of 0.000 ($p < 0.05$), indicating that lactation education had a significant effect on increasing the knowledge levels of breastfeeding mothers at Manembo-Nembo Hospital, Bitung City.

Discussion

This study shows that lactation education significantly increased the knowledge level of breastfeeding mothers at Manembo-Nembo Hospital in Bitung City. Descriptive analysis results showed a shift in the distribution of knowledge levels from the poor and sufficient categories to the good category after the educational intervention. This finding is supported by the Wilcoxon test results, which showed a significant difference between knowledge scores before and after lactation education, thus confirming the effectiveness of education as a strategy to improve breastfeeding literacy in postpartum mothers. The increase in knowledge after lactation education is in line with the concept that knowledge is the initial foundation for changing health behaviors. According to the *Health Belief Model* and *Social Cognitive Theory* , individuals who have an adequate understanding of the benefits, risks, and how to perform a health behavior will be better prepared to adopt and maintain that behavior (Glanz et al., 2015; Bandura, 2018). In the context of breastfeeding, understanding the benefits of breast milk,

correct attachment techniques, and managing lactation problems plays a crucial role in building mothers' confidence to breastfeed optimally, especially in the early postpartum period, which is often accompanied by physical discomfort and anxiety.

The results of this study are consistent with previous studies that reported that lactation education and counseling are effective in improving breastfeeding knowledge and practices. A quasi-experimental study by Abuidhail et al. (2017) found that mothers who received structured breastfeeding education showed significant improvements in breastfeeding knowledge and self-efficacy scores compared to before the intervention. Other studies in health facilities have shown that lactation counseling provided by trained health workers can improve mothers' understanding of breastfeeding techniques and reduce the incidence of early breastfeeding cessation (Sinha et al., 2015; Balogun et al., 2016). The increase in the proportion of mothers with good knowledge after education in this study is also in line with the findings of a systematic review that concluded that health facility-based educational interventions have a stronger impact when delivered during the perinatal period, particularly while the mother is still in the hospital (Kim et al., 2018). Hospitals are strategic environments because mothers are in an active learning phase and have direct access to health workers, so the education provided tends to be more easily accepted and applied. This supports the WHO recommendation that breastfeeding education be a core component of quality maternity care standards (WHO, 2017).

In this study, although most mothers showed an increase in their knowledge levels, a small proportion of respondents remained in the adequate and inadequate knowledge categories after the education. This finding indicates that a single education session may not be sufficient to optimally reach all mothers. Factors such as education level, previous breastfeeding experience, postpartum fatigue, and the mother's psychological state can influence the mother's ability to receive and understand the information provided (Brown, 2017; Shorey et al., 2019). Therefore, suboptimal outcomes in some respondents should be understood as part of individual variation, not a failure of the overall intervention. The lack of analysis of confounding factors in this study, such as education level or parity, on changes in knowledge, is a limitation worth noting. However, clinically, the increase in median knowledge scores and the shift in the distribution of knowledge categories indicate that lactation education still provides significant benefits. Previous research also confirms that increased knowledge is an important *intermediate outcome* , as it is closely linked to increased self-efficacy and the long-term success of exclusive breastfeeding practices (Brockway et al., 2017; Chang et al., 2020).

The clinical implications of this study are highly relevant for midwifery and maternity nursing services. Lactation education has been shown to be a simple, inexpensive, and effective non-pharmacological intervention to improve maternal readiness for breastfeeding. Health workers, particularly midwives and nurses, have a strategic role in providing structured and continuous education from the antenatal to postnatal period. Integrating lactation education into postpartum care standards in hospitals can be a crucial step in supporting the success of exclusive breastfeeding and reducing dependence on formula milk (UNICEF, 2019). Furthermore, the results of this study support the need to strengthen internal hospital policies related to breastfeeding promotion, including the provision of easily understood educational materials, training health workers as lactation counselors, and ensuring continuity of education after mothers are discharged through referral to primary health care facilities. This research can also serve as a basis for developing evidence-based lactation education programs tailored to local socio-cultural characteristics in Bitung City and the surrounding area.

Overall, this discussion confirms that lactation education is a key intervention in improving mothers' knowledge of breastfeeding. While individual responses vary, the results of this study strengthen the evidence that lactation education provided in hospitals significantly contributes to mothers' readiness to breastfeed and has the potential to support increased success of exclusive breastfeeding in Indonesia.

4. CONCLUSION

This study aimed to analyze the effect of lactation education on improving mothers' breastfeeding knowledge at Manembo-Nembo Hospital in Bitung City. The results showed that lactation education played a significant role in improving mothers' breastfeeding knowledge, as reflected in a shift in understanding toward a better category after the intervention. These findings confirm the scientific significance that lactation education is a crucial component in efforts to change breastfeeding behavior, as knowledge serves as the foundation for developing attitudes, self-efficacy, and optimal breastfeeding practices. Clinically, the results of this study indicate that the integration of structured and continuous lactation education into postpartum care at the hospital can be an effective strategy to support successful breastfeeding and improve the quality of midwifery care.

REFERENCES

Abuidhail, J., Al-Modallal, H., Yousif, R., & Almresi, N. (2017). Exclusive breastfeeding and breastfeeding knowledge among mothers in Jordan. *Journal of Human Lactation, 33*(1), 103–110. https://doi.org/10.1177/0890334416679382

Balogun, O. O., O'Sullivan, E. J., McFadden, A., Ota, E., Gavine, A., Garner, C. D., … MacGillivray, S. (2016). Interventions for promoting the initiation of breastfeeding. *Cochrane Database of Systematic Reviews, 2016*(11), CD001688. https://doi.org/10.1002/14651858.CD001688.pub3

Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science, 13*(2), 130–136. https://doi.org/10.1177/1745691617699280

Brockway, M., Benzies, K., & Hayden, K. A. (2017). Interventions to improve breastfeeding self-efficacy and resultant breastfeeding rates: A systematic review and meta-analysis. *Journal of Human Lactation, 33*(3), 486–499. https://doi.org/10.1177/0890334417707957

Brown, A. (2017). Breastfeeding as a public health responsibility: A review of the evidence. *Journal of Human Nutrition and Dietetics, 30*(6), 759–770. https://doi.org/10.1111/jhn.12496

Central Statistics Agency. (2023). *Percentage of infants aged 0–5 months who receive exclusive breastfeeding by province.* BPS Republic of Indonesia.

Chang, Y. S., Glaria, A. A., Davie, P., Beake, S., Bick, D., & Taylor, B. (2020). Breastfeeding self-efficacy and related outcomes: A systematic review. *Midwifery, 90*, 102810. https://doi.org/10.1016/j.midw.2020.102810

Dennis, C. L. (2015). Theoretical underpinnings of breastfeeding confidence: A self-efficacy framework. *Journal of Human Lactation, 31*(3), 388–395. https://doi.org/10.1177/0890334415575194

Glanz, K., Rimer, B. K., & Viswanath, K. (2015). *Health behavior: Theory, research, and practice* (5th ed.). Jossey-Bass.

Jaafar, S. H., Ho, J. J., Lee, K. S., & Brown, J. (2016). Rooming-in for new mother and infant versus separate care for increasing the duration of breastfeeding. *Cochrane Database of Systematic Reviews, 2016*(8), CD006641. https://doi.org/10.1002/14651858.CD006641.pub3

Kim, S. K., Park, S., Oh, J., Kim, J., & Ahn, S. (2018). Interventions promoting exclusive breastfeeding up to six months after birth: A systematic review and meta-analysis of randomized controlled trials. *International Journal of Nursing Studies, 80*, 94–105. https://doi.org/10.1016/j.ijnurstu.2018.01.004

McFadden, A., Gavine, A., Renfrew, M. J., Wade, A., Buchanan, P., Taylor, J. L., … MacGillivray, S. (2017). Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews, 2017*(2), CD001141. https://doi.org/10.1002/14651858.CD001141.pub5

Ministry of Health of the Republic of Indonesia. (2022). *Indonesian Demographic and Health Survey (IDHS) 2022: Summary of main results.* Ministry of Health of the Republic of Indonesia.

Ministry of Health of the Republic of Indonesia. (2023). *Indonesian Health Survey (SKI) 2023: Summary of main results.* Ministry of Health of the Republic of Indonesia.

Nair, N., Tripathy, P., Sachdev, H. S., Pradhan, H., Bhattacharyya, S., Gope, R., … Costello, A. (2020). Effect of participatory women's groups and counselling on breastfeeding practices. *BMC Public Health, 20*, 282. https://doi.org/10.1186/s12889-020-8367-1

Pérez-Escamilla, R., Martinez, J. L., & Segura-Pérez, S. (2017). Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: A systematic review. *Maternal & Child Nutrition, 12*(3), e12376. https://doi.org/10.1111/mcn.12376

Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., … Victora, C. G. (2016). Why invest, and what it will take to improve breastfeeding practices? *The Lancet, 387*(10017), 491–504. https://doi.org/10.1016/S0140-6736(15)01044-2

Shorey, S., Chan, S. W. C., & Chong, Y. S. (2019). A systematic mixed-methods review on breastfeeding education and support. *Journal of Advanced Nursing, 75*(6), 1100–1117. https://doi.org/10.1111/jan.13941

UNICEF, & World Health Organization. (2018). *Implementation guidance: Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services.* WHO.

UNICEF, & World Health Organization. (2023). *Global breastfeeding scorecard 2023: Rates, trends and disparities.* WHO.

UNICEF. (2019). *Breastfeeding: A mother's gift, for every child.* UNICEF.

Victora, C. G., Bahl, R., Barros, A. J. D., França, G. V. A., Horton, S., Krasevec, J., … Rollins, N. C. (2016). Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. *The Lancet, 387*(10017), 475–490. https://doi.org/10.1016/S0140-6736(15)01024-7

World Health Organization, & UNICEF. (2021). *Global strategy for infant and young child feeding.* WHO.

World Health Organization. (2017). *Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services.* WHO.