

The Connection Between Health Education, Exclusive Breastfeeding, and Infant Weight Gain: A Scoping Review

Shilvia¹, Zulvayanti², Dewi Marhaeni Diah Herawati³, Hadi Susiarno², Dany Hilmanto⁴, Setyorini Irianti²

¹Master of Midwifery Program, Faculty of Medicine, Universitas Padjadjaran, Bandung, West Java, Indonesia. ²Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Padjadjaran, Bandung, West Java, Indonesia

Email corespondensi: shilvia71092@gmail.com

Track Record Article

Revised: 07 May 2025 Accepted: 11 June 2025 Published: 30 June 2025

How to cite:

Shilvia, Zulvayanti, Herawati, D. M. D., Susiarno, H., Hilmanto, D., & Irianti, S. (2025). The Connection Between Health Education, Exclusive Breastfeeding, and Infant Weight Gain: A Scoping Review. Contagion: Scientific Periodical Journal of Public Health and Coastal, 7(1), 415-427.

Abstract

This study aims to explore the relationship between health education, exclusive breastfeeding, and infant weight gain. Exclusive breastfeeding is recognized as the best nutrition for infants; however, adherence to breastfeeding practices is often influenced by the mother's level of education. Through a scoping review approach, we collected and analyzed a total of 10 recent studies that discuss the impact of health education on mothers' attitudes and behaviors regarding exclusive breastfeeding, in line with the PRISMA framework. The analysis results indicate that mothers with adequate health education are more likely to understand the benefits of exclusive breastfeeding and demonstrate a stronger commitment to it. Additionally, optimal exclusive breastfeeding contributes to healthy growth and weight development in infants. These findings emphasize the importance of health education interventions in supporting successful breastfeeding practices, which can improve infants' nutritional status. Further research is needed to explore additional factors influencing this relationship and to formulate more effective strategies for promoting exclusive breastfeeding.

Keyword: Health Education, Exclusive Breastfeeding, Infant Weight Gain

INTRODUCTION

Exclusive breastfeeding (EBF) is essential for supporting infant health, particularly in reducing the risk of infections and promoting healthy development. Although its advantages are well-established, the consistent practice of EBF remains a challenge and is often affected by factors such as maternal education. Previous research has emphasized the role of health education in influencing mothers' knowledge and attitudes toward breastfeeding. Nevertheless, there is still a lack of research specifically examining the effects of structured health education interventions on EBF practices. (Mohamed Ahmed et al., 2023)

Counseling and education regarding exclusive breastfeeding have been shown to have a positive impact on mothers' success in breastfeeding, which directly affects the improvement of infants' nutritional status and weight gain. Through targeted education and ongoing support, mothers become more confident and consistent in providing breast milk without additional foods or drinks, ensuring that the nutritional needs of infants are optimally met during the first six months of life. (Sumiyati et al., 2024)

³Department of Public Health, Faculty of Medicine, Universitas Padjadjaran, Bandung, West Java, Indonesia ⁴Department of Child Health, Faculty of Medicine, Universitas Padjadjaran, Bandung, West Java, Indonesia

Health education plays a vital role in improving community well-being, especially in addressing the nutritional needs of infants. It equips mothers and families with the knowledge and skills required to practice proper healthcare, including exclusive breastfeeding. When delivered effectively, health education can foster positive attitudes and behaviors that promote infant health. The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life, as it provides complete nutrition and essential antibodies to protect against disease. Providing only breast milk—without introducing other foods or liquids—is crucial for meeting infants' nutritional needs, supporting their growth, development, and immune system. However, the success of exclusive breastfeeding heavily depends on the mother's knowledge and the support she receives during this period. Infant weight gain is a key measure of health and nutritional status in early life. Educational programs focused on exclusive breastfeeding help improve mothers' understanding of nutritional needs and correct breastfeeding techniques, which can enhance breastfeeding outcomes and contribute to optimal infant growth. Therefore, structured health education serves as a critical strategy in promoting exclusive breastfeeding and supporting appropriate infant weight gain based on health guidelines. (Hamidah, 2023)

METHODS

This research adopts a scoping review approach, which follows a systematic method for identifying, evaluating, and synthesizing existing studies related to the research topic (Pool et al., 2024). The process began with the development of a well-defined research focus and the establishment of specific inclusion and exclusion criteria to guide the literature search. An extensive review was carried out using academic databases, peer-reviewed journals, and other relevant sources. The gathered literature was then filtered through a structured selection process based on the predetermined criteria. Selected articles were subjected to qualitative data extraction and interpretive analysis to identify key themes, trends, and interconnections between concepts. This method enables a comprehensive synthesis of current evidence, providing thorough insights into the research questions. The questions themselves were structured using the Population, Exposure, and Outcome (PEO) framework, as outlined in Table 1 (Alan Davies, 2024). One of the primary questions explored was: "What is the role of health education in enhancing exclusive breastfeeding and promoting healthy infant weight gain?"

Table 1: Selection of the PEO Mnemonic

Population	Exposure	Outcome
Breastfeeding	Health Education	Exclusive Breastfeeding and
mother		improving infant weight
		gain

Source: Author's Discussion, 2025

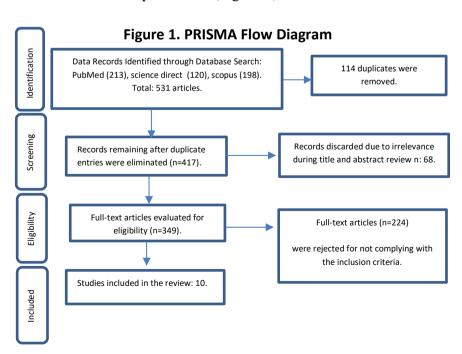
The author outlines the study's parameters by setting inclusion and exclusion criteria for the literature review (Table 2) to ensure relevance, using keywords such as Health Education, Exclusive Breastfeeding, baby weight gain.

Table 2: Criteria for Inclusion and Exclusion

Criteria for Inclusion	Criteria for Exclusion
Articles published between the years 2020 and	Books, blogs
2025	
Articles presented in Indonesian as well as English	Full article access requires a purchase
Articles available in full text	

Source: Author's Discussion, 2025

The researcher performed a literature review utilizing multiple academic search engines according to specified keywords. A total of 531 items were successfully gathered, with the subsequent distribution: 213 articles sourced from PubMed, 120 from ScienceDirect, and 198 from Scopus. The author structured this scoping review in accordance with PRISMA guidelines and included A PRISMA chart representing the count of identified articles along with the screening procedure, The studies that met the inclusion criteria and the ultimate selection of literature for an in-depth review (Figure 1).



RESULTS

The data synthesis method used in this study involves collecting and summarizing publications that meet the inclusion criteria into a structured table. This table displays information on the titles, findings, methodologies, and results of the 10 reviewed articles.

Table 2 Data Extraction

Author(s)/ Year	Title	Research Design	Objective	Sample Size	Conclusion
Siti Hamidah / 2023	Exclusive Breastfeeding Support to Increase Exclusive Breastfeeding at Muhammadiyah Gresik Hospital	Quasi- Experimental (Pre-Post Test)	To assess the impact of Communication, Information and Education (CIE) on mothers' knowledge, breast care, breastfeeding techniques, and attitudes toward exclusive breastfeeding.	100 postpartum mothers	CIE effectively improved mothers' knowledge, breastfeeding skills, and attitudes, with a breastfeeding success rate of 91%. There were no negative ranks, a positive ranking of 50.50, and no ties. (Hamidah, 2023)
Dewi Roudhotul Hasanah, et al. / 2020	The Effectiveness of Forming Breastfeeding Support Group Programs to Improve Exclusive Breastfeeding	Case Study (Comparative Descriptive)	The purpose of this study is to compare the efficiency of support groups in Sugihwaras and Sumbergede villages in terms of increasing the rate of exclusive breastfeeding.	74 women with a child less than two years old who participated in breastfeeding support	Sumbergede's intervention program was more effective since it had the potential to be a sustainable program with a higher proportion of accomplishment. (85.71%) compared to Sugihwaras (80%) in forming breastfeeding support groups. Sumbergede had more success and power in resources in its region. (Hasanah et al., 2020)
Akhil Preet Kaur et al. / 2025	Difference in weight gain among breast- fed and mix-fed infants at 6 weeks	Cross- sectional comparative study	To assess the difference in weight gain among infants who were exclusively breastfed and those who were mix-fed at 6 weeks of life	200 neonates (100 exclusively breastfed and 100 mix-fed infant)	No significant difference in weight gain between exclusively breastfed and mix-fed infants at 6 weeks, but breastfeeding is encouraged for health benefits. (Kaur et al., 2025)
Fanny Aldana-Parra et al. / 2019	Effectiveness of a new approach for exclusive breastfeeding counselling on breastfeeding prevalence, infant growth velocity and postpartum	Randomized Controlled Trial	To evaluate a new approach to breastfeeding counselling based on Carl Rogers' theory in overweight women and its effects on breastfeeding	290 women (145 per group)	The intervention is expected to increase exclusive breastfeeding rates, support adequate infant growth, and promote maternal weight loss, providing evidence to inform public health policies. (Aldana-Parra et al., 2020)

	woight loss !-		provolence !f		
	weight loss in overweight or obese women: protocol for a randomized controlled trial		prevalence, infant growth velocity, and maternal postpartum weight loss.		
Yanti Anggraini et al. / 2024	The Effect of Exclusive Breastfeeding on Infant Weight Gain	Experimental Design (Control Group Pre- and Post-Test)	To evaluate the impact of exclusive breastfeeding on infant weight gain	60 mothers (30 mothers in the control group and 30 mother in the intervention group)	Exclusive breastfeeding significantly affects infant weight gain during the first six months, influenced by maternal experience and knowledge. (Anggraini et al., 2024)
Harismayanti et al. / 2024	The Relationship Between Exclusive Breastfeeding and Baby's Weight	Cross- Sectional Study	To examine the relationship between exclusive breastfeeding and weight gain in infants.	50 infants aged 6-7 months	There is a significant relationship between exclusive breastfeeding and increased weight in infants, with better outcomes observed in those exclusively breastfed. (Harismayanti et al., 2024)
Moses Collins Ekwueme et al. / 2025	Breastfeeding Experience, Barriers, and Facilitators Among Mothers of Vulnerable Low Birth Weight Infants in Amhara Region, Ethiopia: A Qualitative Exploratory Study	Qualitative Descriptive Study	To explore the breastfeeding experiences, barriers, and facilitators for mothers of low birth weight (LBW) newborns in Ethiopia.	30 mothers of LBW newborns	Mothers of LBW newborns face significant chalenges in initiating and maintaining breastfeeding due to insufficient milk production, lack of support, and prolonged separation from their infants. Enhanced support and standardized protocols are needed. (Ekwueme et al., 2025)
Agung Dwi Laksono, et al / 2021	The effects of mother's education on achieving exclusive breastfeeding in Indonesia	A cross- sectional analysis with data from the 2017 Nutrition Status Monitoring Survey.	To investigate the influence of maternal education level on the prevalence of exclusive breastfeeding in Indonesia.	53,528 children under 5 years old (7–59 months)	The study found that a mother's education level positively affects exclusive breastfeeding in Indonesia, with factors like age, job, child's age, and residence also influencing breastfeeding rates. Targeted policies are needed to improve coverage, especially for mothers with low education, those employed, and living in rural areas. (Laksono et al., 2021)
Rezyana Budi Syahputri, et al / 2020	Role of Public Health Center Staffs in Socialization, Education and Campaign to Increase	Descriptive Qualitative (Case Study)	To investigate the role of public health center staff in socialization, education, and campaigns aimed at increasing	2 Main + 3 Triangulasi	Socialization and education programs have been implemented, but the campaign has not. A lack of collaboration among Gilingan Public Health Center workers is

	Exclusive Breastfeeding Coverage		exclusive breastfeeding coverage in the Gilingan Public Health Center's working environment.		the reason the campaign wasn't implemented. (Syahputri & Akmal, 2020)
Anny Larnkjær et al. / 2025	Infants with Excessive Weight Gain while Exclusively Breastfeeding: Follow-Up at 36 Months	Follow-Up Study	To investigate growth and body composition at 36 months in exclusively breastfed infants experiencing excessive weight gain (EWG) during the first 6 months.	10 infants with EWG	Infants with EWG showed a decrease in body mass index-for-age z-scores and fat mass, while lean mass increased, indicating normalization of body weight and composition. (Larnkjær et al., 2025)

Multiple studies suggest that health education delivered through primary healthcare services, such as community health centers, can positively influence mothers' knowledge, attitudes, and breastfeeding behaviors. For instance, one study demonstrates that educational interventions significantly enhance maternal understanding and attitudes toward breastfeeding. Other research highlights the effectiveness of support initiatives, like breastfeeding support groups, in boosting the rates of exclusive breastfeeding. Additionally, evidence indicates that guidance and encouragement from healthcare providers play a crucial role in supporting successful breastfeeding practices.(Rosyidah et al., 2024)

Numerous studies highlight the critical role of healthcare professionals, including midwives and nurses, in delivering information and emotional support to breastfeeding mothers. This support has been shown to enhance maternal confidence in their ability to breastfeed. However, some research also points out obstacles in the implementation of health education programs, such as limited coordination and insufficient resources within healthcare settings. These challenges can undermine the effectiveness of initiatives aimed at promoting exclusive breastfeeding. (Laksono et al., 2021).

Primary healthcare facilities play a crucial role in providing health education to pregnant and breastfeeding women. Through structured educational programs, healthcare providers can offer accurate information about the importance of exclusive breastfeeding, empowering mothers with the knowledge to make informed decisions about infant nutrition. These programs help address misconceptions and ensure that mothers understand the significant health benefits of exclusive breastfeeding for both themselves and their babies. (Clendon & Dignam, 2010)

Besides providing educational support, healthcare professionals in primary care also deliver emotional and practical help to mothers. This assistance includes advice on correct

breastfeeding methods and resolving common issues like latching problems or low milk supply. Through awareness campaigns and community outreach, healthcare centers can increase public knowledge about the advantages of exclusive breastfeeding, which helps improve its success rates. Moreover, strong collaboration among healthcare providers and other key stakeholders is crucial to guarantee that these programs are adequately funded and accessible to the mothers who need them most. (Prihatiningsih, 2023)

The prevalence of exclusive breastfeeding in Indonesia has increased, with 73.97% of infants being exclusively breastfed in 2023. However, several challenges continue to impede reaching higher rates. These obstacles include limited support from the community, particularly for working mothers, as well as the intensified marketing of formula milk .(Hamidah, 2023)

Another challenge faced is the low level of public knowledge and awareness regarding the significance of exclusive breastfeeding, in addition access is limited to healthcare facilities that support the breastfeeding process. Therefore, strengthening educational and informational about the advantages of exclusively breastfeeding is necessary, both through educational programs at community health centers and through broader health campaigns. (Mertasari et al., 2024)

Healthcare professionals play a vital role in supporting breastfeeding mothers by providing accurate information and emotional support. They should be involved in the educational process for the public regarding the benefits of exclusive breastfeeding and how to address various issues that may arise during the breastfeeding period. Additionally, healthcare facilities should provide comfortable breastfeeding spaces to facilitate mothers in exclusively breastfeeding more easily. (Alao et al., 2024)

Table 3: Overview of the Research Outcomes (n = 10)

Indicator		Significance			
		References			
The Influence of Health Education on Breastfeeding Practices	3	(Hamidah, 2023) (Hasanah et al., 2020) (Kaur et al., 2025)			
The Relationship Between Exclusive Breastfeeding and Infant Weight Gain	3	(Aldana-Parra et al., 2020) (Anggraini et al., 2024) (Harismayanti et al., 2024)			

Indicator		Significance			
		References			
Family and Healthcare Support in Successful Breastfeeding	4	(Ekwueme et al., 2025) (Laksono et al., 2021) (Syahputri & Akmal, 2020) (Larnkjær et al., 2025)			

DISCUSSION

Good knowledge about exclusive breastfeeding contributes to better breastfeeding practices, which in turn improves children's nutritional status. Mothers' strong understanding of exclusive breastfeeding is directly related to breastfeeding success. Mothers who know the proper methods and timing for breastfeeding are more likely to breastfeed, contributing to better nutritional status for their children. (Fairuz SMW & Fadilah, 2025)

The success of exclusive breastfeeding, influenced by maternal knowledge, is also affected by emotional support from the family. Therefore, there is a need for better educational programs and increased family support to encourage exclusive breastfeeding, especially in communities with different cultural practices. (Naufal et al., 2023)

Interventions involving healthcare professionals can help change attitudes toward breastfeeding by providing emotional and practical support. Healthcare providers should be involved in ongoing programs to ensure that knowledge and support are continuously offered, as information can fade over time. (Čatipović, 2021)

Breast milk contains all the nutrients necessary for the growth and development of infants, including protein, fat, carbohydrates, vitamins, and minerals. The composition of breast milk, tailored to the needs of the baby, helps ensure healthy growth and optimal weight gain. Several studies have shown a positive relationship between exclusive breastfeeding and healthy weight gain in infants. For example, studies indicate that infants who are exclusively breastfed during the first six months tend to have better weight and more optimal growth compared to those who are given formula or solid foods earlier. (Muhammad, 2024)

The main advantage of exclusive breastfeeding is its ability to support healthy weight gain in infants. Breast milk is designed to meet the nutritional needs of babies, helping them achieve optimal growth. Additionally, breast milk contains antibodies and immunological factors that protect infants from infections, ensuring better health and enhancing nutrient absorption. Research shows that infants who are exclusively breastfed for six months tend to

have better weight compared to those who are given formula or solid foods earlier. Breast milk is also easier to digest, making it an ideal choice for infants whose digestive systems are still developing. With all these benefits, exclusive breastfeeding significantly contributes to the long-term growth and development of infants, making it a vital practice for child health.(Larnkjær et al., 2025)

Breast milk is easier to digest compared to formula or solid foods. This is important for infants, especially newborns, as their digestive systems are still in the developmental stage. Good digestion ensures that infants receive sufficient calories for growth. (Perrella et al., 2021)

Exclusive breastfeeding has a significant impact on infants' weight gain for several key reasons. First, the ideal nutritional composition of breast milk is specifically designed to meet the nutritional needs of infants. Breast milk contains a balanced proportion of proteins, fats, and carbohydrates necessary for the growth and development of babies. For example, the fats in breast milk are crucial for brain development, while proteins aid in tissue growth. (Lyons et al., 2020)

Second, the antibodies and immunological factors in breast milk help protect infants from infections and diseases. With better health, infants can absorb nutrients more efficiently, contributing to optimal growth and weight gain. Third, breast milk is easier to digest compared to formula. Infants have a still-developing digestive system, and breast milk provides nutrition in a way that is more friendly to their digestive tract. This allows infants to obtain more calories from breast milk without experiencing discomfort. Furthermore, the interaction between mother and baby during breastfeeding creates an important emotional bond. Stimulation from the baby while breastfeeding can stimulate increased milk production, ensuring that the baby receives enough nutrition to support growth. Finally, research shows that exclusively breastfed infants tend to have better hunger and satiety regulation, which helps them develop healthy eating patterns in the future. With all these factors, exclusive breastfeeding proves to be more effective in supporting healthy weight gain in infants. (Anggraini et al., n.d.)

Mothers who understand the benefits of breast milk are more likely to be motivated to adopt proper breastfeeding practices. This journal demonstrates that efforts to enhance mothers' knowledge through health education can improve exclusive breastfeeding practices, which are vital for children's health and development. (Dukuzumuremyi et al., 2020) Good health education is essential for enhancing mothers' knowledge about exclusive breastfeeding, which in turn can improve breastfeeding practices. Ongoing educational efforts and support from healthcare professionals are necessary to ensure that the knowledge mothers acquire can be effectively implemented in practice. (Nikanor et al., 2023)

Interventions designed to enhance knowledge and support for exclusive breastfeeding, such as educational programs and counseling for mothers, have proven effective in improving exclusive breastfeeding practices. With training for healthcare professionals, they can provide better information to mothers, thereby increasing awareness and mothers' ability to provide exclusive breastfeeding. Awareness campaigns about the advantages of exclusive breastfeeding, should be widely conducted, involving the community and healthcare providers. Through campaigns and outreach activities, the public can better understand the importance of exclusive breastfeeding, which in turn can encourage positive breastfeeding behaviors. Effective outreach can help address the myths and barriers that mothers often face in providing exclusive breastfeeding. (Dib et al., 2024)

The Breastfeeding Support Group program involves training community health workers and outreach efforts that enhance mothers' understanding of the importance of exclusive breastfeeding. With support from healthcare providers and community leaders, mothers feel more motivated to breastfeed exclusively. Regular meetings and discussions allow mothers to obtain the information they need to overcome challenges in breastfeeding. Commitment from families and the community also plays a significant role in supporting mothers to succeed in providing exclusive breastfeeding. (Hasanah et al., 2020)

Interventions that involve training for healthcare providers, peer support, and technology-based communication have been shown to increase exclusive breastfeeding rates as well as nursing duration. (Blanco et al., 2025)Interventions designed to enhance the knowledge and skills of healthcare providers in supporting breastfeeding mothers have proven effective. By providing appropriate education and structured support, health visitors can help mothers feel increased confidence in breastfeeding.. This underscores the importance of training and outreach for healthcare providers in improving exclusive breastfeeding practices. Effective interventions and good outreach can enhance exclusive breastfeeding practices and reduce social inequalities, this is critical for the health of moms and children. (Rossau et al., 2024)

Interventions that involve education, community support, and training for healthcare providers contribute to the improvement of exclusive breastfeeding practices. These programs also help address the barriers faced by mothers, such as a lack of knowledge and social support. (Chipojola et al., 2022) Educational programs show a clear increase in mothers' confidence in nursing and the success rates of exclusive breastfeeding compared to the control group. These programs include elements of education, practical support, and effective positive reinforcement. (Tseng et al., 2020).

CONCLUSIONS

Health education is essential in increasing mothers' awareness and understanding of the significance of exclusive breastfeeding. Studies indicate that mothers who receive proper health education are more likely to recognize the advantages of exclusive breastfeeding, leading to improved breastfeeding practices. With adequate support, mothers tend to feel more confident and consistent in exclusively providing breast milk, which is vital for fulfilling an infant's nutritional requirements during the first six months.

Exclusive breastfeeding has been linked to healthy weight gain in infants, as it supplies all the necessary nutrients for proper growth and development. Additionally, exclusively breastfed infants have a reduced risk of infections and illnesses, which enhances nutrient absorption and supports optimal growth. As such, a combination of comprehensive health education and effective breastfeeding practices is critical in ensuring infants receive the nutrition they need for healthy development. The involvement of healthcare professionals is also key, as their support strengthens mothers' knowledge and confidence in breastfeeding.

REFERENCE

- Alao, M. A., Ibrahim, O. R., Briggs, D. C., Yekinni, S. A., Nri-Ezedi, C. A., Sotimehin, S. A., Olasinde, Y. T., Aliu, R., Borokinni, A. M., Elo-Ilo, J. C., Bello, O. O., Diala, U. M., Olaniyi-George, J. F., Adeniyi, T. O., Ashiru, U. H., & Tongo, O. O. (2024). Breastfeeding support among healthcare workers in Nigeria. *Discover Health Systems*, 3(1), 46. https://doi.org/10.1007/s44250-024-00094-6
- Aldana-Parra, F., Olaya, G., & Fewtrell, M. (2020). Effectiveness of a new approach for exclusive breastfeeding counselling on breastfeeding prevalence, infant growth velocity and postpartum weight loss in overweight or obese women: protocol for a randomized controlled trial. *International Breastfeeding Journal*, 15(1), 2. https://doi.org/10.1186/s13006-019-0249-2
- Anggraini, Y., Maria, D., & Leniwita, H. (2024). *THE EFFECT OF EXCLUSIVE BREASTFEEDING ON INFANT WEIGHT GAIN*. 2815. https://doi.org/10.5281/zenodo.12743356
- Blanco, S., Aboul-Enein, B. H., Benajiba, N., & Dodge, E. (2025). A Scoping Review of Breastfeeding Interventions and Programs Conducted Across Spanish-Speaking Countries. *Health Promotion Practice*, 26(1), 168–191. https://doi.org/10.1177/15248399241237950
- Čatipović, M. (2021). Effects of a Breastfeeding Educational Intervention on Secondary School Students after 6 Months. *Acta Clinica Croatica*. https://doi.org/10.20471/acc.2021.60.04.02
- Chipojola, R., Khwepeya, M., Gondwe, K. W., Rias, Y. A., & Huda, M. H. (2022). The Influence of Breastfeeding Promotion Programs on Exclusive Breastfeeding Rates in Sub-Saharan Africa: A Systematic Review and Meta-Analysis. *Journal of Human Lactation*, *38*(3), 466–476. https://doi.org/10.1177/08903344221097689
- Clendon, J., & Dignam, D. (2010). Child health and development record book: tool for relationship building between nurse and mother. *Journal of Advanced Nursing*, 66(5), 968–977. https://doi.org/10.1111/j.1365-2648.2010.05285.x

- Dib, S., Fair, F. J., McCann, L. J., Nicholls, A., Kalea, A. Z., Soltani, H., & Fewtrell, M. (2024). Effects of Exclusive Breastfeeding Promotion Interventions on Child Outcomes: A Systematic Review and Meta-Analysis. *Annals of Nutrition and Metabolism*, 80(2), 57–73. https://doi.org/10.1159/000535564
- Dukuzumuremyi, J. P. C., Acheampong, K., Abesig, J., & Luo, J. (2020). Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. *International Breastfeeding Journal*, *15*(1), 70. https://doi.org/10.1186/s13006-020-00313-9
- Ekwueme, M. C., Tesfaye, Y. A., Biza, H., Belew, M. L., Asefa, M., Asnakew, D., Gobezayehu, A. G., Cranmer, J., & Young, M. F. (2025). Breastfeeding experience, barriers, and facilitators among mothers of vulnerable low birth weight infants in Amhara region, Ethiopia: a qualitative exploratory study. *International Breastfeeding Journal*, 20(1), 51. https://doi.org/10.1186/s13006-025-00731-7
- Fairuz SMW, A., & Fadilah, T. F. (2025). Maternal Knowledge of Exclusive Breastfeeding and Nutritional Status of Children Under Two Years During the COVID-19 Pandemic. *Journal of Society Medicine*, 4(1), 1–7. https://doi.org/10.71197/jsocmed.v4i1.189
- Hamidah, S. (2023). Exclusive Breastfeeding Support to Increase Exclusive Breastfeeding at Muhammadiyah Gresik Hospital. *Poltekita: Jurnal Ilmu Kesehatan*, *17*(3), 886–896. https://doi.org/10.33860/jik.v17i3.2811
- Harismayanti., Retni, A., Lihu, F. A., Ahmad, F., Studi Keperawatan, P., & Ilmu Kesehatan, F. (2024). Hubungan pemberian ASI Eksklusif Dengan Berat Badan Bayi. In *Jambura Nurisng Journal* (Vol. 6, Issue 1). http://ejurnal.ung.ac.id/index.php/jnj|120
- Hasanah, D. R., Putri, N. K., & Pramono, A. Y. (2020). EFFECTIVENESS OF FORMING BREASTFEEDING SUPPORT GROUP PROGRAM TO IMPROVE EXCLUSIVE BREASTFEEDING. *Jurnal Administrasi Kesehatan Indonesia*, 8(1), 5. https://doi.org/10.20473/jaki.v8i1.2020.5-19
- Kaur, A. P., Dhar, S., Khajuria, A., Gupta, R. K., & Rana, W. (2025). Difference in weight gain among breast-fed and mix-fed infants at 6 weeks. *International Journal of Contemporary Pediatrics*, 12(2), 234–239. https://doi.org/10.18203/2349-3291.ijcp20250090
- Laksono, A. D., Wulandari, R. D., & Matahari, R. (2021). The determinant of health insurance ownership among pregnant women in Indonesia. *BMC Public Health*, 21(1), 1538. https://doi.org/10.1186/s12889-021-11577-z
- Laksono, A. D., Wulandari, R. D., Ibad, M., & Kusrini, I. (2021). The effects of mother's education on achieving exclusive breastfeeding in Indonesia. *BMC Public Health*, 21(1), 14. https://doi.org/10.1186/s12889-020-10018-7
- Larnkjær, A., Larsson, M. W., Wells, J., Christensen, S. H., Lewis, J. I., Mølgaard, C., & Michaelsen, K. F. (2025). Infants with Excessive Weight Gain while Exclusively Breastfeeding: Follow-Up at 36 Months. *Breastfeeding Medicine*, 20(5), 338–344. https://doi.org/10.1089/bfm.2024.0387
- Lyons, K. E., Ryan, C. A., Dempsey, E. M., Ross, R. P., & Stanton, C. (2020). Breast milk, a source of beneficial microbes and associated benefits for infant health. In *Nutrients* (Vol. 12, Issue 4). MDPI AG. https://doi.org/10.3390/nu12041039
- Mertasari, L., Duarsa, D. P., Ani, L. S., Kusuma, A. A. N. J., & Bakta, I. M. (2024). Healthcare Professional' Roles Educate Exclusive Breastfeeding: A Qualitative Exploratory Study of Strategies and Challenges. *Public Health of Indonesia*, 10(3), 422–439. https://doi.org/10.36685/phi.v10i3.837
- Mohamed Ahmed, S. O., Ashgar, R. I., Mohammed Abdelgader, A. A., Abdalla Hamid, H. I., Mathkor, D. M., Abdelsadig Ali, M. A., Mousa Mohmed, S. A., Ali Farg, S. J., Mohamed Ebrahim, R. A., Mustafa Gabir Tia, M., Humza Bashir, W. A., & Ali Hazazi, Z. H.

- (2023). Exclusive breastfeeding: Impact on infant health. *Clinical Nutrition Open Science*, *51*, 44–51. https://doi.org/10.1016/j.nutos.2023.08.003
- Muhammad, N. (2024). The benefits of exclusive breastfeeding: a comprehensive literature review. *I-Manager's Journal on Nursing*, *13*(4), 21. https://doi.org/10.26634/jnur.13.4.20156
- Naufal, F. F., Indita, H. R., & Muniroh, L. (2023). Hubungan Pengetahuan Ibu dan Dukungan Keluarga dengan Pemberian ASI Eksklusif. *Amerta Nutrition*, 7(3), 442–448. https://doi.org/10.20473/amnt.v7i3.2023.442-448
- Nikanor, V., Nghitanwa, E. M., & Nakweenda, M. (2023). Knowledge of breastfeeding women regarding exclusive breastfeeding in one district in Omusati region, Namibia. *Journal of Public Health in Africa*, 14(12), 5. https://doi.org/10.4081/jphia.2023.2396
- Perrella, S., Gridneva, Z., Lai, C. T., Stinson, L., George, A., Bilston-John, S., & Geddes, D. (2021). Human milk composition promotes optimal infant growth, development and health. *Seminars in Perinatology*, 45(2), 151380. https://doi.org/10.1016/j.semperi.2020.151380
- Prihatiningsih, A. D. (2023). Support of Health Workers in the Success of Exclusive Breastfeeding: Scoping Review. *Asian Journal of Healthy and Science*, 2(2), 94–103. https://doi.org/10.58631/ajhs.v2i2.32
- Rossau, H. K., Gadeberg, A. K., Strandberg-Larsen, K., Nilsson, I. M. S., & Villadsen, S. F. (2024). Process evaluation of a breastfeeding support intervention to promote exclusive breastfeeding and reduce social inequity: a mixed-methods study in a cluster-randomised trial. *International Journal for Equity in Health*, 23(1), 204. https://doi.org/10.1186/s12939-024-02295-0
- Rosyidah, H., Khadka, S., & Sunah. (2024). Breastfeeding education training program for healthcare professionals: A narrative review. *Journal of Health Technology Assessment in Midwifery*, 7(1), 43–49. https://doi.org/10.31101/jhtam.3538
- Sumiyati, S., Masyitah, M. W., & Firna, F. F. (2024). Penyuluhan Dan Pendampingan Pemberian Asi Ekslusif Pada Bayi Baru Lahir Terhadap Peningkatan Berat Badan Bayi. *Jurnal Pendidikan Dan Teknologi Kesehatan*, 7(1), 97–104. https://doi.org/10.56467/jptk.v7i1.122
- Syahputri, R. B., & Akmal, D. (2020). The Role of Public Health Center Staffs in Socialization, Education and Campaign to Increase Exclusive Breastfeeding Coverage. *Journal of Health Education*, *5*(2), 86–93. https://doi.org/10.15294/jhe.v5i2.36063
- Tseng, J.-F., Chen, S.-R., Au, H.-K., Chipojola, R., Lee, G. T., Lee, P.-H., Shyu, M.-L., & Kuo, S.-Y. (2020). Effectiveness of an integrated breastfeeding education program to improve self-efficacy and exclusive breastfeeding rate: A single-blind, randomised controlled study. *International Journal of Nursing Studies*, 111, 103770. https://doi.org/10.1016/j.ijnurstu.2020.103770