

# Knowledge, Attitude, And Practice of Breastfeeding Among Mothers of Preterm Infants: Literature Review

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**Abstract:** Background: Breastfeeding is a vital source of nutrition for infants, influencing their health and development. The composition of breast milk varies between mothers of preterm and term infants, impacting neurodevelopmental outcomes. Knowledge, attitude, and practices of breastfeeding significantly influence its success, particularly among mothers of preterm infants.

**Purpose:** The purpose is to review the literature on Knowledge, attitudes, and practices of breastfeeding among mothers of preterm infants.

**Methods:** A comprehensive search strategy including PubMed, Scopus, and Google Scholar, identified 17 relevant studies from 2018 to 2023. The studies encompassed diverse designs, such as cross-sectional, systematic reviews, meta-analyses, and observational and interventional studies.

**Findings:** Studies revealed varying levels of knowledge among mothers, revealing higher knowledge positively correlating with exclusive breastfeeding. Attitudes, influenced by societal acceptance and cultural beliefs played a crucial role in finding breastfeeding practices. Despite positive attitudes, challenges such as work-related issues impacted the ability to keep exclusive breastfeeding. Practices indicated gaps between knowledge and actual behavior emphasizing the need for supportive interventions. Nursing strategies including educational programs, spiritual care, and family-centered approaches were identified to reduce maternal stress and support preterm infants' mothers.

**Conclusion:** Targeted educational programs, workplace support, and breastfeeding-friendly environments are crucial for improving breastfeeding rates and duration. Bridging the knowledge gap in this area will contribute to developing interventions and support systems tailored to the unique needs of preterm mothers, enhancing breastfeeding outcomes for preterm infants, and informing broader healthcare practices.

**Keywords:** Knowledge, attitude, preterm, breastfeeding maternal knowledge, exclusive.

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## 1. INTRODUCTION

Breastfeeding serves as a natural and essential source of nutrition for infants, providing them with the necessary energy and minerals during the first six months of life (World Health Organization [WHO], 2014; Hossain, Islam, Kamarul, & Hossain, 2018). Exclusive breastfeeding plays a crucial role in improving the health of both mother and child, leading to reduced healthcare costs and lower rates of infant morbidity and mortality. Breastfeeding practices have the potential to prevent approximately 1.4 million deaths in children under the age of five annually (WHO, 2014).

Moreover, breastfeeding strengthens the bond between mother and child, thereby reducing the risk of childhood illnesses such as sepsis and meningitis (Holtzman & Usherwood, 2018; Ogbo et al., 2018). It also offers protection against conditions like pneumonia, diabetes mellitus, and diarrhea (Ogbo et al., 2018).

The World Health Organization (WHO) and UNICEF recommend exclusive breastfeeding for the first six months for all mothers. Exclusive breastfeeding refers to the practice of providing infants with only vitamins, minerals, and medications, without any other food or drink during the first six months of life. Globally, approximately 38% of babies are exclusively breastfed during this period.

The composition of breast milk differs between mothers of preterm and term infants. In the early lactation period, breast milk from mothers of preterm infants contains higher levels of protein, fat, free amino acids, and sodium, although these concentrations decrease over time (Underwood, 2012). Additionally, preterm milk and colostrum exhibit significantly higher levels of bioactive components such as fucosylated human milk oligosaccharides (HMOs), cytokines, growth factors, and lactoferrin (Underwood, 2012). Studies have shown that providing a mother's milk (MOM) to preterm infants can improve neurodevelopmental outcomes and reduce the risk of necrotizing enterocolitis (NEC) and retinopathy of prematurity (Underwood, 2012; Neu & Walker, 2011).

The underdeveloped sucking reflex of preterm infants, along with the potential emotional challenges faced by their mothers, can make breastfeeding a complex and demanding task. Providing supportive resources and understanding the needs of mothers of preterm infants is imperative to promote successful breastfeeding practices. Knowledge, attitude, and practice of breastfeeding among mothers of preterm infants play a significant role in determining the success and duration of exclusive breastfeeding. Understanding the factors influencing breastfeeding practices in this population is essential for devising effective interventions and support systems.

This literature review aims to examine the existing research on the knowledge, attitude, and practice of breastfeeding among mothers of preterm infants. By synthesizing the findings from relevant studies, this review seeks to identify gaps in knowledge, highlight areas for improvement, and provide recommendations for future research and practice.

## 2. SEARCH STRATEGY

This literature review employed a comprehensive search strategy to identify relevant studies focusing on maternal knowledge attitude, and practice about breastfeeding. The search approach encompassed a diverse range of study designs and publication years to ensure a thorough exploration of the literature on infant feeding, breastfeeding practices, and maternal support. A wide-ranging selection of studies from 2017 to 2023 was captured through an inclusive search strategy utilizing electronic databases, specifically PubMed, Scopus, CINAHL, and Google Scholar. The search employed a combination of keywords such as "breastfeeding," "maternal knowledge," "exclusive breastfeeding," "breastfeeding practices," "breastfeeding duration," "working mothers and breastfeeding," "breastfeeding education," "breastfeeding perceptions," "breastfeeding cessation," "breastfeeding challenges," "breastfeeding in [specific country or region]," and related terms. Boolean operators (AND, OR NOT) and truncation/wildcard symbols were strategically used to combine search terms and capture variations thereof. The studies were conducted in diverse countries including India, East Africa, South Jordan, China, Japan, Turkey, Qatar, the United Arab Emirates, Ethiopia, and Saudi Arabia.

## 3. STUDY FINDINGS

In this literature review, we have identified various studies related to breastfeeding knowledge, attitudes, and practices. These studies were conducted in different countries. The selected studies cover a range of topics such as breastfeeding knowledge and practices among women in different settings, factors influencing exclusive breastfeeding, attitudes towards breastfeeding, and the role of healthcare providers in promoting breastfeeding. Among the listed studies, the following are the findings.

The search was limited to English-language publications and resulted in the identification of a total of 17 research articles. These articles comprised 2 educational programs (experimental studies), 10 cross-sectional studies, 2 systematic reviews and meta-analyses, 2 observational studies, and 1 interventional study.

## 4. KNOWLEDGE ABOUT BREASTFEEDING AMONG MOTHERS

The studies by Alyousefi (2021) and Azzeh et al. (2018) highlight the influence of maternal knowledge on breastfeeding practices. Mothers with higher knowledge about the benefits and techniques of breastfeeding are more likely to engage in exclusive breastfeeding and have a better understanding of the importance of early initiation.

A study conducted by Mirghani et al. (2020) found that the knowledge about breastfeeding among female teachers in Albaha City, Saudi Arabia, was low, leading to incorrect practices and a high prevalence of formula feeding. In another study Dabelah et al. (2023) revealed that a small percentage of participants had good knowledge about breastfeeding in the eastern

region of Saudi Arabia, suggesting a need for continuous education to improve breastfeeding knowledge. In a cross-sectional study conducted in the United Arab Emirates by Al Ketbi et al. (2018), The study found that higher breastfeeding knowledge scores were associated with a higher likelihood of exclusive breastfeeding.

In Ethiopia, a systematic review and meta-analysis conducted by Alemayehu Toma et al. (2019) aimed to assess the pooled estimate of women's knowledge, attitudes, practices, and determinants of exclusive breastfeeding. The study found that the pooled prevalence of good knowledge regarding exclusive breastfeeding among women in Ethiopia was 74.2%.

In Qatar, Nasser et al. (2018) found that approximately 42% of mothers stopped breastfeeding between 0 and 11 months of age, indicating a lower adherence to the recommended exclusive breastfeeding duration. Factors such as having only one female child were associated with earlier cessation of breastfeeding. Maternal perceptions of not knowing how to breastfeed and not producing enough milk were inversely associated with breastfeeding duration.

Another study conducted by Sultania et al. (2019) in India identified a significant knowledge gap and discrepancies in breastfeeding behaviors among women. There was a need for healthcare worker counseling and educational programs to address misconceptions and promote healthy breastfeeding behaviors, particularly among women with low education and limited resources.

In South Jordan, Altamimi et al. (2017) reported that working mothers faced challenges in maintaining exclusive breastfeeding due to work-related issues. Although they had satisfactory knowledge and positive attitudes toward breastfeeding, only a small percentage of working mothers were exclusively breastfeeding by 6 months. The study highlighted the importance of breastfeeding-friendly workplaces and support from occupational health nurses.

Overall, these studies emphasize the importance of addressing knowledge gaps, to improve breastfeeding rates and duration. Targeted education programs, workplace support, healthcare worker counseling, and breastfeeding-friendly environments are crucial interventions to enhance breastfeeding practices globally.

In KSA cross-sectional study was conducted by Dabelah et al. (2023) in the eastern region of Saudi Arabia to assess the breastfeeding attitude and practice among mothers. The study found a low rate of exclusive breastfeeding after delivery compared to previous studies among Saudi mothers. The study also revealed a decline in breastfeeding after six months and an increase in formula feeding. Additionally, only a small percentage of participants had good knowledge about breastfeeding. The study underscores the need for continuous education and efforts to promote breastfeeding among Saudi mothers, including providing support and resources to improve breastfeeding knowledge and practices.

Surveyed to assess the knowledge, attitude, and practice of female teachers in Albaha City, Saudi Arabia, towards breastfeeding. The study found a low rate of exclusive breastfeeding, incorrect practices with the introduction of a supplementary diet, and a high prevalence of formula feeding among the participants. The study highlights the importance of health education to the significance of breastfeeding among both mothers and fathers.

In another study, Alyousefi (2021) conducted a cross-sectional study to explore the determinants of successful exclusive breastfeeding for Saudi mothers. The study found that social acceptance, specifically the comfort level of mothers with breastfeeding in front of relatives and friends, was a unique predictor of exclusive breastfeeding. This highlights the importance of guidance and support from healthcare professionals in helping mothers overcome breastfeeding challenges and promoting successful exclusive breastfeeding.

These studies collectively demonstrate the importance of addressing the knowledge, attitude, and practice of breastfeeding among Saudi mothers. They highlight the barriers and challenges faced by mothers, the need for guidance and support from healthcare professionals, and the significance of targeted educational programs to promote successful breastfeeding practices.

## **5. ATTITUDE ABOUT BREASTFEEDING MOTHERS**

The attitude of breastfeeding among mothers refers to their beliefs, perceptions, and feelings towards breastfeeding as a feeding method for their infants. It encompasses their emotional and psychological disposition towards breastfeeding, their acceptance of its importance and benefits, their confidence in their ability to breastfeed, and their willingness to initiate and continue breastfeeding (Brown, 2018).

In a cross-sectional study conducted in Saudi Arabia by Albar (2022) to assess mothers' feeding practices among infants aged 4-12 months and identify associated factors. The study emphasizes the role of maternal attitudes towards breastfeeding.

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Factors such as social acceptance, cultural beliefs, and personal preferences can influence a mother's decision to breastfeed and the duration of breastfeeding.

Another study, Alyousefi (2021) identified that social acceptance, particularly the comfort level of mothers with breastfeeding in front of relatives and friends, was a significant predictor of exclusive breastfeeding. This highlights the importance of addressing societal attitudes towards breastfeeding and providing support to mothers.

In Ethiopia, a systematic review and meta-analysis conducted by Alemayehu Toma et al. (2019) aimed to assess the pooled estimate of women's knowledge, attitudes, and practices, revealed that the pooled prevalence of a positive attitude towards exclusive breastfeeding among women in Ethiopia was 77.2%. (Alemayehu Toma et al., 2019)

In another two studies the first study, A cross-sectional survey conducted by Sultania et al. (2019) in a tertiary care center in India Sultania et al. (2019) emphasized the need for healthcare worker counseling and educational programs to address misconceptions and promote positive attitudes towards breastfeeding. the second study a cross-sectional study In South Jordan conducted by Altamimi et al. (2017) found that working mothers had positive attitudes towards breastfeeding but faced barriers in practice due to work-related issues.

Overall, these studies highlight the interconnectedness of knowledge, attitude, and practice in influencing breastfeeding outcomes. Improving knowledge through education, addressing societal attitudes, and promoting supportive practices are crucial for promoting successful breastfeeding practices among Saudi mothers.

### 6. PRACTICE ABOUT BREASTFEEDING AMONG MOTHERS

The World Health Organization recommends initiation of breastfeeding within 1 hour of birth and exclusive breastfeeding up to 6 months of age. Infant feeding practices, including suboptimal breastfeeding practices, are associated with stunting. (Dharel, D., Dhungana, R., Basnet, S.2018)

Three studies conducted by different researchers from Qatar, India, showed that approximately 42% of mothers stopped breastfeeding within the first year of infant age, indicating a gap between knowledge and actual practice (Nasser et al. 2018; Sultania et al. 2019; Altamimi et al. 2017). Sultania et al. (2019) identified discrepancies in breastfeeding behavior among women in India, indicating a need for targeted interventions and improved maternal and child health services. Altamimi et al. (2017) highlighted the challenges faced by working mothers in South Jordan in maintaining exclusive breastfeeding, indicating a gap between knowledge and practice.

Overall, these studies emphasize the importance of supportive practices to improve breastfeeding rates and duration. Targeted education programs, workplace support, healthcare worker counseling, and breastfeeding-friendly environments are crucial interventions to enhance breastfeeding practices globally.

In other studies, a cross-sectional study conducted in the United Arab Emirates by Al Ketbi et al. (2018) showed that only 16.9% of women residing in Abu Dhabi practiced exclusive breastfeeding for 6 months. Factors associated with a lower likelihood of exclusive breastfeeding included being a working mother, living with relatives, having no past exclusive breastfeeding experience, and being offered readymade liquid formula in the hospital.

In Ethiopia, a systematic review and meta-analysis conducted by Alemayehu Toma et al. (2019) reported that the pooled prevalence of poor exclusive breastfeeding practices among women in Ethiopia was 58.3%. Factors associated with exclusive breastfeeding included women having a secondary level of education, being a housewife, delivering vaginally, having a health facility delivery, and attending antenatal care.

A cross-sectional study conducted in the Rabigh community of Western Saudi Arabia by Hegazi et al. (2019) to determine the prevalence of exclusive breastfeeding (EBF) and factors influencing EBF about the knowledge, attitude, and practice (KAP) of breastfeeding mothers (BFM). Hegazi et al. (2019) found that factors such as perception of sufficient human milk, absence of nipple pain, and mothers without university education were associated with exclusive breastfeeding. This demonstrates the influence of practical factors on breastfeeding practices.

In the eastern region of Saudi Arabia, Dabelah et al. (2023) conducted a cross-sectional study to assess breastfeeding attitudes and practices among mothers. Dabelah et al. (2023) revealed a decline in breastfeeding after six months and an increase in formula feeding, indicating the need to address and improve breastfeeding practices beyond the initial months.

Overall, these studies highlight the interconnectedness of knowledge, attitude, and practice in influencing breastfeeding

outcomes. Improving knowledge through education, addressing societal attitudes, and promoting supportive practices are crucial for promoting successful breastfeeding practices among Saudi mothers.

## 7. BREASTFEEDING KNOWLEDGE, ATTITUDE, AND PRACTICE AMONG MOTHERS OF PRETERM INFANTS

In the field of preterm infants, some studies assessed Knowledge, attitude, and practice among mothers of preterm infants, In Turkey a study conducted by (Kemer et al.,2022) examined the knowledge, attitude, and practice of 41 mothers with preterm infants regarding feeding. Results showed that most mothers had high levels of knowledge and good feeding practices. The mothers also reported mild state anxiety and moderate trait anxiety. Positive correlations were found between knowledge and practice, and negative correlations were found between anxiety levels, knowledge, and practice. Offering feeding counseling services during the infant's growth process is recommended to address maternal anxiety.

According to Tanaka and Horiuchi (2021), implementing an education program for nurse-midwives focused on early essential care for breast milk expression among mothers of preterm infants yielded positive results. The study was conducted in Japan.

On the other hand, Kemer, Comuk-Balci, and Serel-Arslan (2022) examined the knowledge, attitude, and practice of mothers with preterm infants concerning feeding. The study took place in Turkey and revealed that mothers had a high level of knowledge and good practice level. However, despite this, they still experienced anxiety. These findings highlight the importance of education programs for healthcare professionals and the need for counseling services to address maternal anxiety in the context of feeding preterm infants.

The two studies have similar findings regarding the knowledge and practice level of mothers with preterm infants about feeding. Both studies indicate that a significant percentage of mothers have a high level of knowledge and good practice level in terms of feeding preterm infants. Additionally, both studies highlight the positive correlation between knowledge and practice, suggesting that higher levels of knowledge are associated with better practices.

However, there are some differences between the two studies. The first study focused on the effects of an education program on nurse midwives' knowledge, attitude toward care, and care implementation. It found that the education program had significant positive effects on these factors. On the other hand, the second study focused on the anxiety levels of mothers and found that although they had high levels of knowledge and practice, they still experienced anxiety.

To summarize, both studies show the importance of knowledge and practice in feeding preterm infants. The first study emphasizes the role of education programs for healthcare professionals, while the second study highlights the need for counseling services to address maternal anxiety. These findings can be used as part of a comprehensive literature review in an academic research paper examining knowledge and application of essential care for breastfeeding among mothers of preterm infants.

## 8. NURSING STRATEGIES AND SUPPORT

Maleki et al. (2022) focus on nursing strategies to support mothers of preterm infants in the NICU. This theme overlaps with the importance of support and education for breastfeeding mothers, as highlighted in the other studies.

Maleki et al. (2022) conducted a systematic review and meta-analysis of nursing strategies for supporting mothers of preterm infants in the NICU. The review highlighted the importance of various interventions such as educational programs, spiritual care, telenursing, skin-to-skin care, and family-centered care in reducing maternal stress and supporting mothers of preterm infants.

Overall, the studies recommend the following actions to improve breastfeeding practices in Saudi Arabia and the Middle East, Culturally appropriate breastfeeding educational programs for women, focusing on managing breastfeeding challenges and promoting breastfeeding knowledge Promoting Kangaroo Mother Care (KMC) practices, including immediate skin-to-skin contact between newborns and mothers; Providing family support throughout the; breastfeeding journey, including antenatal and postnatal follow-up; Integrating health education on breastfeeding into antenatal care; Implementing interventions such as educational programs, spiritual care, telenursing, and family-centered care to support mothers of preterm infants in the NICU; Addressing factors associated with not breastfeeding and delaying early initiation, such as rooming-in practices, pacifier use, and bottle feeding.

## 9. CONCLUSION

The existing literature lacks specific studies focusing on the knowledge, attitudes, and practices of breastfeeding among preterm mothers in Jeddah, Saudi Arabia. While there have been studies on breastfeeding practices in general, there is a lack of research targeting mothers of preterm infants. Understanding the unique challenges and experiences of preterm mothers is crucial in promoting successful breastfeeding practices among this group. By investigating the knowledge, attitudes, and practices of breastfeeding among preterm mothers in Jeddah, this study aims to fill this gap and provide valuable insights into their specific needs and experiences. The findings from this study can contribute to the development of targeted interventions and support systems that address the challenges faced by preterm mothers in initiating and sustaining breastfeeding. Focusing on this specific population will provide a comprehensive understanding of the factors influencing breastfeeding practices among preterm mothers in Jeddah, uncover specific barriers or misconceptions, and help healthcare professionals tailor their interventions and support accordingly. Conducting this study will contribute to the existing body of knowledge, fill the research gap, and provide insights that can inform policies and practices aimed at improving breastfeeding outcomes for preterm mothers in Jeddah. Bridging this knowledge gap will contribute to the improvement of breastfeeding outcomes among preterm infants in Jeddah and have broader implications for breastfeeding research and healthcare practices in similar settings.

## REFERENCES

- [1] Altamimi, E., Al Nsour, R., Al Dalaen, D., & Almajali, N. (2017). knowledge, attitude, and practice of breastfeeding among working mothers in South Jordan. *Workplace health & safety*, 65(5), 210-218. <https://journals.sagepub.com/doi/full/10.1177/2165079916665395>
- [2] Alyousefi, N. A. (2021). Determinants of successful exclusive breastfeeding for Saudi mothers: Social acceptance is a unique predictor. *International Journal of Environmental Research and Public Health*, 18(10), 5172. <https://doi.org/10.3390/ijerph18105172>
- [3] Al Ketbi, M. I., Al Noman, S., Al Ali, A., Darwish, E., Al Fahim, M., & Rajah, J. (2018). Knowledge, attitudes, and practices of breastfeeding among women visiting primary healthcare clinics on the island of Abu Dhabi, United Arab Emirates. *International breastfeeding journal*, 13, 1-14. <https://doi.org/10.1186/s13006-018-0165-x>
- [4] Avery, M. E., Tooley, W. H., & Keller, J. B. (1987). Is chronic lung disease in low-birth-weight infants preventable? A survey of 8 centers. *Pediatrics*, 79, 26-30. <https://doi.org/10.1542/peds.79.1.26>
- [5] Azzeh, F. S., Alazzeh, A. Y., Hijazi, H. H., Wazzan, H. Y., Jawharji, M. T., Jazar, A. S., ... & Obeidat, A. A. (2018). Factors associated with not breastfeeding and delaying the early initiation of breastfeeding in Mecca Region, Saudi Arabia. *Children*, 5(1), 8. <https://doi.org/10.3390/children5010008>
- [6] Brown, A. (2018). What do women lose if they are prevented from meeting their breastfeeding goals *Clinical Lactation*, 9(4), 200-207. <https://doi.org/10.1891/2158-0782.9.4.200>
- [7] 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, 1-17. <https://doi.org/10.1186/s13006-020-00313-9>
- [8] Dabelah, K. I., Al Luwaimi, S., Al-Saleem, S. A., & Akbar, Z. (2023). Assessment of Breastfeeding Attitude and Practice among Mothers of Eastern Region of Saudi Arabia: A Cross-sectional Study <https://doi.org/10.21203/rs.3.rs-2509739/v1>
- [9] Dharel, D., Dhungana, R., Basnet, S. *et al.* Breastfeeding practices within the first six months of age in mid-western and eastern regions of Nepal: a health facility-based cross-sectional study. *BMC Pregnancy Childbirth* 20, 59 (2020). <https://doi.org/10.1186/s12884-020-2754-0>
- [10] Hegazi, M. A., Allebdi, M., AL Mohammadi, M., Alnafie, A., Al-Hazmi, L., & Alyoubi, S. (2019). Factors associated with exclusive breastfeeding about knowledge, attitude, and practice of breastfeeding mothers in Rabigh community, Western Saudi Arabia. *World journal of pediatrics*, 15, 601-609. <https://doi.org/10.1007/s12519-019-00275-x>
- [11] Holtzman, C., & Usherwood, T. (2018). Breastfeeding and maternal and infant health outcomes in developed countries.

- Current opinion in pediatrics, 30(2), 191-196. <https://pubmed.ncbi.nlm.nih.gov/17764214/>
- [12] Hossain, S. J., Islam, A., Kamarul, T., & Hossain, G. (2018). Exclusive breastfeeding and its association with the mother and immediate family members due to under-five children. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 12(6), 1055-1060. <https://doi.org/10.1177/0890334417737038>.
- [13] Kemer, S. N., Comuk-Balci, N., & Serel-Arslan, S. (2022). Knowledge, attitude, and practice of mothers with preterm infants in terms of feeding. *Pediatric Nursing*, [Advance online publication]. <https://doi.org/10.21203/rs.3.rs-1250170/v1>
- [14] Maleki, M., Mardani, A., Harding, C., Basir Nezhad, M. H., & Vaismoradi, M. (2022). Nurses' strategies to provide emotional and practical support to the mothers of preterm infants in the neonatal intensive care unit: A systematic review and meta-analysis. *Women's Health*, 18, 17455057221104674. <https://doi.org/10.1177/17455057221104674>
- [15] Mirghani, E., Alghamdi, J. M., and Ibrahim, M. M. (2020). "A Survey on Knowledge, Attitude, and Practice of Female Teachers about Breastfeeding in Albaha Region, KSA." <https://pubmed.ncbi.nlm.nih.gov/18543837/>
- [16] Neu, J., and Walker, W. A. (2011). "Necrotizing enterocolitis." *New England Journal of Medicine*, 364, 255-264. <https://doi.org/10.1056/nejmra1005408>
- [17] Nasser, A., Omer, F., Al-Lenqawi, F., Al-Awwa, R., Khan, T., El-Heneidy, A., ... & Al-Jayyousi, G. (2018). Predictors of continued breastfeeding at one year among women attending primary healthcare centers in Qatar: A cross-sectional study. *Nutrients*, 10(8),983. <https://doi.org/10.3390/nu10080983>
- [18] Ogbo, F. A., Nguyen, H., Naz, S., Agho, K. E., & Page, A. (2018). The association between infant and young child feeding practices and diarrhea in Tanzanian children. *Tropical Medicine and International Health*, 23(1), 14-23. <https://doi.org/10.1186/s41182-018-0084-y>
- [19] Randhawa, A., Chaudhary, N., Gill, B. S., Singh, A., Garg, V., & Balgir, R. S. (2019). A population-based cross-sectional study to determine the practices of breastfeeding among the lactating mothers of Patiala city. *Journal of family medicine and primary care*, 8(10), 3207. [https://doi.org/10.4103/jfmpe.jfmpe\\_549\\_19](https://doi.org/10.4103/jfmpe.jfmpe_549_19)
- [20] Underwood, M. A. (2012). Human milk for the premature infant. *Pediatric Clinics of North America*, 60(1), 189-207. <https://doi.org/10.1016/j.pcl.2012.09.008>
- [21] Sultania, P., Agrawal, N. R., Rani, A., Dharel, D., Charles, R., & Dudani, R. (2019). Breastfeeding knowledge and behavior among women visiting a tertiary care center in India: A cross-sectional survey. *Annals of Global Health*, 85(1). <https://doi.org/10.5334/aogh.2093>
- [22] Trevisanuto, D., Putoto, G., Pizzol, D., Serena, T., Manenti, F., et al. (2016). Is a woolen cap effective in maintaining normothermia in low-birth-weight infants during kangaroo mother care? Study protocol for a randomized controlled trial. *Trials*, 17, 265. <https://doi.org/10.1186/s13063-016-1387-0>
- [23] Tanaka, R., & Horiuchi, S. (2021). Implementing an education program for nurse-midwives focused on early essential care for breast milk expression among mothers of preterm infants. *International Breastfeeding Journal*, 16(1), 1-11. <https://doi.org/10.1186/s13006-021-00395-z>
- [24] UNICEF. (2021). From the first hour of life: Making the case for improved infant and young child feeding everywhere. Retrieved from <https://data.unicef.org/resources/first-hour-life-making-case-improved-infant-young-child-feeding-everywhere/>.
- [25] World Health Organization. (2014). Global strategy for infant and young child feeding. Retrieved from <https://www.who.int/nutrition/publications/infantfeeding/global-strategy-iycf-2014>.