

Factors Hindering Compliance with Exclusive Breastfeeding Practices Among Mothers: A Narrative Review

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Introduction: Commencing a child's developmental path with the unparalleled advantages of exclusive breastfeeding establishes the cornerstone for optimal health. Despite understanding the importance of exclusive breastfeeding (EBF), many mothers still face challenges in adhering to it. The objective of this review is to thoroughly delineate the barriers to exclusive breastfeeding.

Methods: Searches were conducted using PubMed, Google Scholar, and manually to retrieve studies from 2014-2024. Using our inclusion criteria, we selected studies that described barriers to exclusive breastfeeding. Qualitative and quantitative studies and survey reports published in English were considered. The descriptors used in this study were: factors, determinants, causes, barriers, hindering, influencing, and exclusive breastfeeding. Thirty-two studies from various countries were included.

Result: Out of the 244 articles identified, 32 met the inclusion criteria. Most of the included studies were cross-sectional and were published between 2014 and 2024. Evidence indicates that breastfeeding support is crucial for extending both the duration and exclusivity of breastfeeding. Factors such as physiological issues, health-related barriers, and limitations within the healthcare system significantly impact exclusive breastfeeding practices. Interventions addressing these factors are essential for improving exclusive breastfeeding rates and enhancing maternal and child health outcomes.

Conclusion: Despite being widely practised, exclusive breastfeeding (EBF) rates remain low due to challenges faced by many mothers. Addressing these barriers through targeted interventions during antenatal and postnatal education can help improve and sustain EBF practices.

Keywords: factors, determinants, causes, barriers, hindering, influencing, exclusive breastfeeding

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Introduction

Breastfeeding is crucial, as strongly endorsed by agencies like the World Health Organization (WHO), the United Nations International Children's Emergency Fund (UNICEF), the American Academy of Pediatrics (AAP), and the Centers for Disease Control and Prevention (CDC). Breast milk is the ideal nutritional source for newborns and young children. [1] It is secure, affordable, hygienic, easily accessible, and loaded with antibodies that help prevent a variety of common pediatric illnesses.[2] Breastfeeding reduces the risk of infant mortality and morbidity,[3] enhances the maternal bond with the child [4] and safeguards mothers by preventing breast cancer, and ovarian cancer and lowering the risk of diabetes.[5]

Less than half of newborns under 6 months old are exclusively breastfed, despite World Health Organization (WHO) recommendations. WHO works to raise the percentage of EBF during the first six months of a child's life to at least 50% by 2025.[2] Despite the myriad benefits and numerous interventions aimed at promoting EBF, its prevalence remains unacceptably low globally and exhibits significant variations within and between countries. According to a 2019 UNICEF report approximately 44% of children worldwide were exclusively breastfed, with Asian countries reporting a slightly higher prevalence at 57%.[6] Over the past ten years, there has been a notable and impressive increase of 10 percentage points in the global prevalence of exclusive breastfeeding, reaching a significant 48 percent. However, to reach the global 2030 target of 70 percent, the barriers women and families face to achieving their breastfeeding goals must be addressed.[4]

Determinants of exclusive breastfeeding during the first six months include a variety of sociodemographic, workplace, obstetric, and healthcare-related factors, as well as the feeding choices and breastfeeding support available to mothers. Additional challenges like the lack of family support, experience of partner violence, and pressure from a partner desiring more children were also identified.[7] Moreover, the decline in exclusive breastfeeding has been linked to traditional practices like giving newborns water and other homemade preparations, as well as the widespread promotion of breastmilk substitutes.[8]

Although extensive research has examined the sociodemographic, infant, and maternal factors associated with non-compliance, there is a significant lack of studies exploring the full range of barriers to exclusive breastfeeding (EBF). To address this gap, we conducted a narrative review to gain a more comprehensive understanding of the challenges faced by breastfeeding mothers and to support future initiatives aimed at improving breastfeeding rates.

Material And Methods

Search Strategy

A systematic literature search for relevant articles was conducted using two electronic databases, PubMed, and Google Scholar, having entries between 2014 and 2024. Additional studies that met the inclusion criteria were manually reviewed and integrated.

The search strategy incorporated the following terms: 'factors', 'determinant', 'causes', 'barriers', 'hindering', 'influencing', 'exclusive breastfeeding', 'breastfeed exclusively'. Boolean operators (AND, OR, NOT) were used to combine synonyms and keywords describing the main concepts.

For organizing this review, we included both quantitative and qualitative studies and survey reports covering factors hindering exclusive breastfeeding among mothers. The detailed search strategies are presented in Supplementary Materials File S1.

Inclusion and Exclusion Criteria

Four inclusion criteria were used to select the relevant articles, which include:

1. Articles written in English were included for easy comprehension.
2. Articles published in scientific journal
3. Study methodology: quantitative and/or qualitative studies, Survey reports
4. Studies that assessed the determinants, causes and factors associated with non-compliance towards exclusive breastfeeding.

Exclusion criteria used for scrutinizing the articles

1. Review articles were excluded.
2. Studies carried out primarily among HIV populations.

3. Studies assessed the factors associated with non-exclusive breastfeeding among mothers having children older than 2 years.

4. Studies examining only the prevalence of Exclusive and non-exclusive breastfeeding.

Study Selection and Data Extraction

All identified studies were independently assessed for relevance based on the objective of the review, study titles and abstracts.

Studies that met the predefined inclusion criteria were retained for critical data extraction. (Fig. No.1) We extracted information that included the author's name, year, study location, study design, study subject, sample size, sampling technique, description of study participants, data source, measurement of exclusive breastfeeding, and barriers to EBF. Hindering factors/barriers to exclusive breastfeeding were then grouped into categories and presented as a narrative summary.

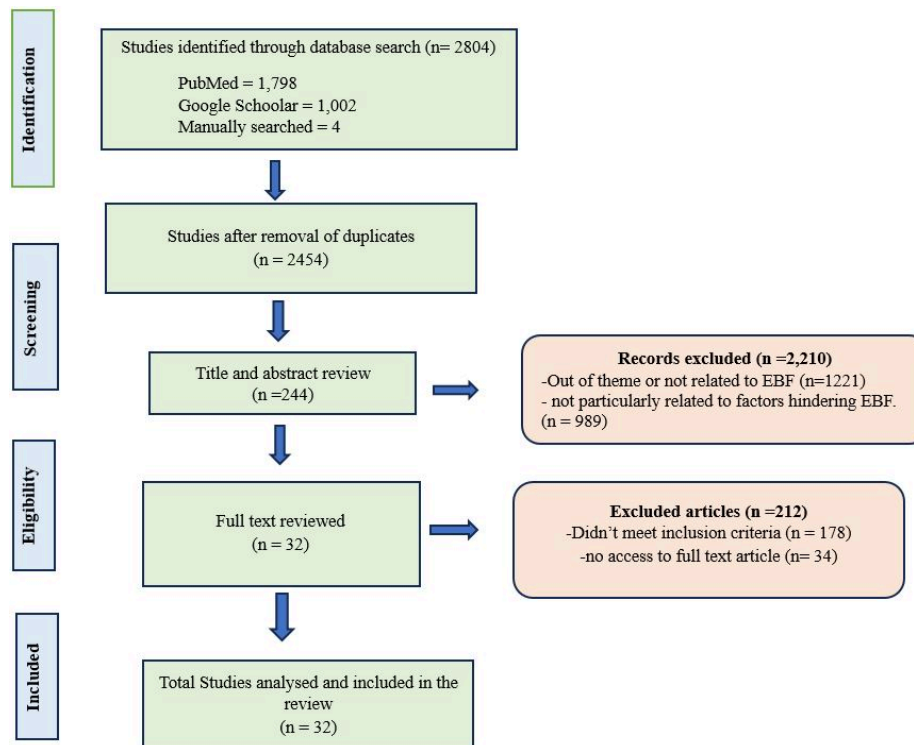


Figure 1: Flowchart showing identification of studies included in a narrative review.

Result

A total of 32 studies were identified, originating from various continents and countries, including Nigeria, Ghana, Kenya, Cameroon, Ethiopia and the Democratic Republic of Congo in Africa; Thailand, Brunei, China, India, Pakistan, Iran, Israel, Bangladesh and Indonesia in Asia; Austria and Spain in Europe; Brazil in South America; and Canada in North America. Among these 32 studies, 6 were qualitative, while the remaining studies were quantitative and survey reports. Qualitative studies used in-depth interviews and focus group discussions.

Data Extraction and Synthesis

The majority of the studies were sourced from the 'International Breastfeeding Journal' to maintain authenticity.

The data extraction process identified a wide range of hindering factors from the studies, which were categorized into 6 broad domains. (Supplementary File S2). One reviewer primarily conducted the data analysis, and the findings were discussed with other team members to ensure the accuracy of the result.

Factors Hindering Exclusive Breastfeeding

Sociodemographic Factors

We found that non-compliance with exclusive breastfeeding in the first six months after birth was more likely among primiparous mother,[9-14] mothers with low or no education, first-time mothers,[10,11,19] particularly those from the literature class residing in urban areas.[20-23] Moreover, low family income, [14][23][24] poor households,[22] and residing in rural areas[12][22] mothers from joint families, [12][16] were more likely to not adhere to EBF.

Additional factors include smaller household size, higher birth order shorter birth interval mothers over 35 years old, having a female child [17].

Cultural and Social Influences

Traditional practices and attitudes towards breastfeeding

Certain sociocultural beliefs make exclusive breastfeeding challenging, as mothers often feel pressured to follow traditional practices. These practices include diluting [27] or discarding colostrum [10,27] withholding breastfeeding for several days [27][28,] rubbing herbs or cheese on breasts before initiating breastfeeding, and use of animal milk, holy water, or honey.[28] In some cultures, mothers are advised to introduce pre-lacteal feeds and start complementary foods early [16] with a common belief that boys require additional nutrition beyond breast milk.[19][29] Furthermore, myths and misinformation, such as belief that breastfeeding during pregnancy is harmful to baby, can discourage mothers from practising exclusive breastfeeding (EBF). [27]

Family dynamics and social support

Positive family interactions and encouragement foster a conducive environment for breastfeeding, whereas conflicts can undermine process. Lack of support from husbands and family members [14] [29][30] and mothers prioritizing household chores overfeeding, especially if they receive limited or no assistance from their spouse or family, can further complicate EBF. Family influences, such as suggestions or demands from relatives and intentional provision of water or other substances by mothers-in-law, can undermine EBF. [23] In rural settings, where grandmothers and mothers-in-law often hold significant decision-making power, their advice and pressure to discontinue breastfeeding were seen to be influential. [28][31]

Influence of media and marketing

The promotion of formula milk, particularly through advertisements, media, and sponsorship in private hospitals, was associated with a shorter intended duration of exclusive breastfeeding. [29] Findings from one study showed that providing in-hospital formula feeding (IHFF), pacifier use, and easy availability of breast milk substitutes were linked with early discontinuation of breastfeeding in infants.[32]

These factors can collectively impact a mother's milk supply by reducing the frequency of breastfeeding, which is essential for maintaining milk production. [9]

Physiological and Health-Related Challenges:

Common breastfeeding challenges:

Breastfeeding problems are commonly reported obstacles to exclusive breastfeeding, [33] among which insufficient production of milk is the most common, [9],[15],[21],[23],[31],[33][34][35][36] followed by sore nipples. [23][33][34] The first month after birth presents the greatest risk for the occurrence of breastfeeding problems [33] Other problems, such as cracked and painful nipples, [33,36] inverted nipples,[37] mastitis,[36] breast engorgement, [33][36] breast abscess, [36] and latching issues [36],[37] were also experienced by lactating mothers.

Maternal physical health

A mother's physical health plays a crucial role in her ability to breastfeed and produce an adequate milk supply. Women who are obese, underweight, or have known health conditions during pregnancy were more likely to have an insufficient milk supply. [10],[14] Additionally, poor maternal nutritional status,[27] dizziness after breastfeeding, [31] and physical weakness or fatigue can hinder a mother's ability to properly position her baby, further contributing to the early cessation of exclusive breastfeeding (EBF). [37]

Child physical health

Several factors can contribute to the inability to maintain exclusive breastfeeding (EBF) after hospital discharge, particularly in cases involving a lower birth weight or premature [10],[11] neonatal illness. [15],[33] Babies admitted to the Neonatal Intensive Care Unit (NICU) [10],[38] or born preterm often have underdeveloped sucking and swallowing reflexes, making breastfeeding more difficult and challenging. [10] These conditions can complicate breastfeeding efforts and result in a shift away from EBF.

Psychological and perceptual barriers

Psychological and perceptive barriers are interrelated and can have a profound impact on a mother's decision to initiate or continue exclusive breastfeeding.

Mothers often perceive breastfeeding as stressful and boring, with concerns about inadequate milk supply, body image changes, and breast sagging. Educated mothers, in particular, are more worried about weight gain and appearance. Psychological distress due to various issues like inverted nipples, disturbed sleep, lack of knowledge and social discomfort with public breastfeeding also contribute to low breastfeeding intention and commitment. Moreover, a lack of confidence and lower breastfeeding self-efficacy show huge reluctance towards EBF.

Workplace and Environment-Related Challenges

Employment and maternal leave policies

The nature of employment greatly contributes to challenges of maintaining breastfeeding for 6 months. Employed women, particularly in urban and semi-urban jobs/ private jobs, or those requiring night shifts, face significant barriers. Moreover, likelihood of practising EBF decreases among mothers who return to full-time work after childbirth or have a shorter duration of maternity leave. Therefore, providing maternity leaves and special support for working mothers is necessary.

Lack of supportive infrastructure at workplace

A lack of supportive infrastructure at workplace significantly impacts breastfeeding. Key issues include the unavailability of nearby childcare facilities, absence of breastfeeding breaks, and busy work schedules that delay breastfeeding and lead to substituting breast milk with other foods. Lack of privacy, concerns about soiling clothing, and insufficient time for expressing breast milk, combined with unsupportive supervisors, further complicate the situation. A workplace that offers necessary facilities, breaks, and a supportive environment can significantly help mothers maintain breastfeeding for the recommended duration, benefiting both their health and their baby's well-being.

Institutional and Health-Care System Barriers

Pregnancy and delivery factors

A wide range of obstetrical factors can make it difficult for mothers to exclusively breastfeed, particularly in crucial early weeks after birth. Infants born via caesarean section are more likely to face challenges in maintaining EBF.

Additional factors that can hinder EBF after discharge include multiple twin pregnancies, labor induction, use of regional or epidural anesthesia during childbirth, pregnancy complications.

Healthcare access and practices

Mothers who had no ANC visits or incomplete ANC care are also more likely to struggle with EBF. Additionally, factors such as home delivery, deliveries at government institutions, significant distance from health facility, and failure to initiate breastfeeding within first hour after birth further contribute to EBF challenges. Deliveries not taking place in a baby-friendly hospital (BFH) also hinder EBF practices. [14] Improving accessibility and quality of healthcare services is essential for increasing breastfeeding rates.

Healthcare Provider Support and Education

Another critical factor in practice of EBF is support structures. Such structures not only involve family members but also HCPs. Non-supportive and non-promoting attitudes by healthcare members can significantly impact breastfeeding practices. Mothers who are not counselled on breastfeeding within first two days after childbirth are at a higher risk of struggling with EBF. Inadequate breastfeeding support and lack of encouragement from HCPs, unpleasant experiences with HCPs, gaps in information or knowledge (particularly among those who did not attend complete antenatal care), and a shortage of health professionals further contribute to challenges in maintaining EBF.

Strategies To Improve Compliance Towards EBF

Improving exclusive breastfeeding rates and reducing barriers requires a comprehensive approach to addressing individual, social, and systemic challenges.

- Train health workers in counselling techniques to address misperceptions and cultural beliefs and provide clear guidance on formula use.
- Provide antenatal counselling, lactation consultation, and education to mothers, as well as special training for health staff (such as nurses and physicians) on identifying and resolving breastfeeding barriers.
- Provide and enforce workplace policies that support breastfeeding, including on-site childcare, breastfeeding rooms, and paid maternity leave for working mothers.

- Promote breastfeeding by implementing the Ten Steps to Successful Breastfeeding of the Baby-Friendly Hospital Initiative (BFHI).
- HCPs should be equipped with the necessary skills to address difficulties with breastfeeding (such as latching) and to manage breastfeeding problems (like engorgement and mastitis) during postnatal care and follow-up visits through the first 6 months.
- Encourage rooming-in, early breastfeeding initiation for C-section mothers, and skin-to-skin contact for all women to enhance confidence and self-efficacy.
- Address postpartum fatigue, pain, and complications related to caesarean delivery effectively.
- Enhance and maintain breastfeeding support through robust engagement at both household and community levels.
- Involve family members to support mothers in breastfeeding through positive encouragement and sharing household responsibilities.
- Mass media platforms are to be used to encourage breastfeeding rather than the promotion of formula milk.

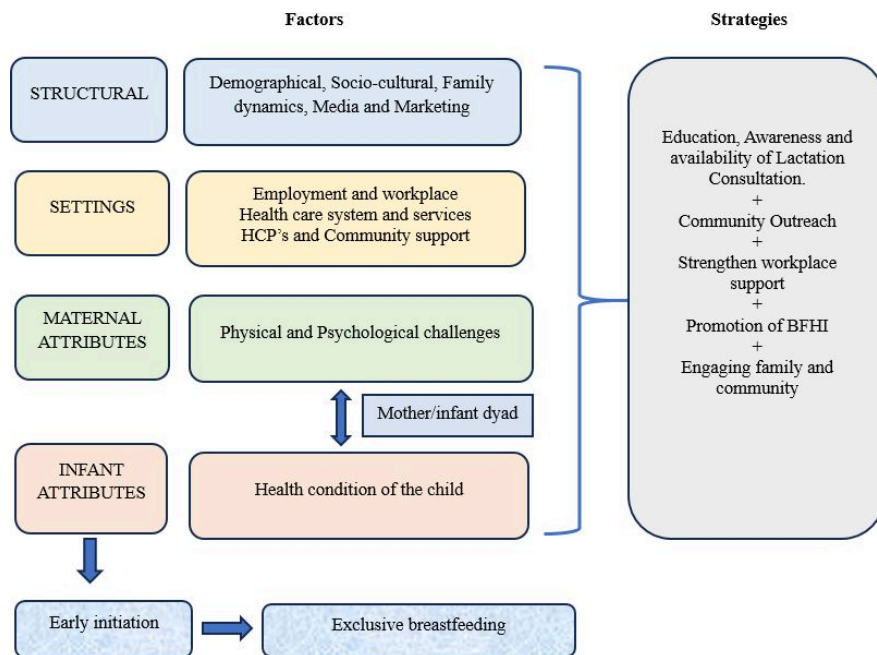


Figure 2: Factors influencing Exclusive Breastfeeding and strategies to improve its compliance

Abbreviations Used

EBF: Exclusive Breastfeeding; HCPs: Health Care Providers; WHO: World Health Organization; UNICEF: United Nations International Children's Emergency Fund; AAP: American Academy of Pediatrics; CDC: Centers for Disease Control and Prevention; C-section: Caesarean Section; BFHI: Baby-friendly Hospital Initiative.

Availability of Data and Materials

All data generated or analyzed during this study are included in this published article [and its supplementary information sheet S1 and S2]

Conclusion

This narrative review focused on identifying the barriers to the practice of EBF.

Five major barriers, namely sociodemographic factors, cultural and social influences, physiological and health-related challenges, workplace and environmental factors, and healthcare system barriers, were identified. Addressing these barriers requires comprehensive support systems, including accurate information, emotional support, and conducive environments for breastfeeding, both at home and in public spaces.

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Key message: Breastfeeding practices among mothers are influenced by a variety of socio-demographic, socio-cultural, employment, institutional access, and health-related factors. Overcoming these barriers requires comprehensive support from HCPs (Healthcare Providers) and policymakers.

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