

EXCLUSIVE BREASTFEEDING PRACTICE AND ASSOCIATED FACTORS AMONG FIRST-TIME MOTHER IN LARKANA

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Abstract: Exclusive breastfeeding (EBF) is defined as the practice of feeding infants solely with breast milk for the first six months of life, without introducing any other liquids or solid foods, except oral rehydration solutions, vitamins, or necessary medications. **Objective:** The main objective of the study is to find the exclusive breastfeeding practice and associated factors among first-time mothers in Larkana, Pakistan. **Methods:** This cross-sectional study was conducted at Sheikh Zayed Women's Hospital Larkana from June 2023 to December 2023. Data involve 345 breastfeeding first-time mothers as participants. Data were collected through a random sampling technique. Participants were first-time mothers with infants aged between 0-6 months, willing to provide informed consent were included in the study. Mothers with serious health conditions or those whose infants had medical complications preventing breastfeeding were excluded. **Results:** Data include 345 participants according to the criteria of the study. The majority of participants in the study were aged between 20-30 years (60.3%), with a smaller proportion under 20 years (9.3%) and over 30 years (30.4%). Most had secondary education or less (68%), while 32% had higher education. Regarding employment status, 59.4% were unemployed, and 40.6% were employed. In terms of socioeconomic status, 40% of participants were from low-income groups, 35% from middle-income, and 25% from high-income. In the study, 58% of participants reported practicing exclusive breastfeeding (EBF), while 42% did not. **Conclusion:** Exclusive breastfeeding rates among first-time mothers remain suboptimal, with significant factors such as maternal age, education, employment status, mode of delivery, and healthcare support playing key roles in influencing EBF practices.

Keywords: Breastfeeding, Exclusive Breastfeeding, First-Time Mothers, Infant Nutrition, Maternal Health.

Introduction

Exclusive breastfeeding (EBF) is defined as the practice of feeding infants solely with breast milk for the first six months of life, without introducing any other liquids or solid foods, except oral rehydration solutions, vitamins, or necessary medications. Breast milk alone contains all the nutrients needed by the child throughout the early stage of development stage which is very critical. Several international health organizations such as WHO and UNICEF encourage EBF as the ideal practice regarding food options for infants because of the life-altering differences that can be seen in babies as a result of practicing this routine (1). EBF has been proven to lower mortality and morbidity from diseases that affect infants and improve cognitive ability and the long-term health of the infant. However, according to the available statistics and research evidence, ESBC remains below the desired level all over the world (2). The current statistics on exclusive breastfeeding by infants show that only 44% of infants in the world are exclusively breastfed for up to six months of their lives despite the WHO's target of increasing this to 50 % by the year 2025. Understanding what has led to this gap requires considering a kaleidoscope of factors, at the individual level, at the level of social relations, and in the environment (3). These can include maternal health conditions, cultural belief systems, norms that are practiced by society, institutions including workplaces, a lack of funds to support a decent maternity leave, or even a lack of education on proper breastfeeding techniques to mention

but a few. Among these various factors, first-time mothers are most vulnerable to EBF initiation and maintenance (4). Being a first-time mum means that the process is bound to be overwhelming and create challenges for exclusive breastfeeding. This development involves learning in that, as first-time mothers, women become engrossed in dozens of new tasks and need time to learn, develop confidence, and restore the physical and psychological health that birth has disrupted (5). It is postulated that first-time mothers are less likely to know common issues related to breastfeeding, which can include problems related to lactation like improper positioning of the baby at the breast, worries over their supply of breast milk, and understanding feeding signals given by their babies. These problems, combined with stress and fatigue that are often characteristic of the postpartum period result in early discontinuation of EBF (6). However, exclusive breastfeeding depends on several personal problems and socioeconomic and demographic characteristics among first-time mothers. This paper examines some of the determinants including the maternal age because prior research indicates that young mothers particularly adolescent mothers practice less EBF than older mothers. It may be as a result of informal education regarding breastfeeding, peer pressure, or societal influence to give formula feed (7). Likewise, again, maternal education is significant, because those with higher education are commonly better informed about the gains of exclusive breastfeeding and assertiveness to continue the practice despite barriers. On this factor, employment status

is another important predictor; most working moms may not be able to afford to EBF their children once they resume work (8). There are considerable impediments when these workplace policies have not been put in place, like paid maternity leave and breastfeeding accommodation. Lack of time after birth to recuperate and limited opportunities to be alone to breastfeed create a challenge to women practicing EBF when holding a job. Even when women decide to breast feed cultural practices and social support systems also influence feeding practices (9). This may be due to a perception that formula feeding is more modern and convenient than breastfeeding or practices that encourage early preparation and provision of complementary foods which can also harbor EBF. Information about EBF and assistance have a significant impact on its outcomes with first-time mothers Depending on healthcare providers for recommendations on breastfeeding (10). This coupled with preparation before birth, counseling during childbirth and early initiation, and timely access to a lactation consultant all greatly enhance the chances of EBF. Yet, gaps and poor quality of the services provided, brief information on breastfeeding, and inadequate postpartum follow-up can discourage the mother from initiating or continuing with exclusive breastfeeding (11). First-time mothers' knowledge of the obstacles and enablers to measuring exclusive breastfeeding is informative in the development of maternal and neonatal health interventions. Responses to these difficulties entail a multiple level that acts at the individual, community, and policy levels. Efforts to promote EBF needed to concentrate on raising mothers' confidence & competencies in managing infant feeding, strengthening social & health care support systems, and making the case for longer & more supportive maternity leave enabling mothers to EBF successfully (12). Thus, the main objective of the study is to find the exclusive breastfeeding practice and associated factors among first-time mothers in Larkana, Pakistan.

Methodology

This cross-sectional study was conducted at Sheikh Zayed Women's Hospital Larkana from June 2023 to December 2023. Data involve 345 breastfeeding first-time mothers as participants. Data were collected through a random sampling technique. Participants were first-time mothers with infants aged between 0-6 months, willing to provide informed consent were included in the study. Mothers with

serious health conditions or those whose infants had medical complications preventing breastfeeding were excluded.

Data were collected through a structured questionnaire. The questionnaire was designed based on standardized tools for assessing breastfeeding practices and included both closed and open-ended questions. It was divided into sections that collected information on demographic factors, socioeconomic status, maternal health, breastfeeding knowledge, attitudes toward breastfeeding, and factors influencing breastfeeding practices.

Key variables assessed in the questionnaire included:

- Maternal age
- Level of education
- Employment status
- Socio-economic status
- Breastfeeding knowledge
- Cultural beliefs and practices
- Family and social support
- Healthcare services and guidance
- Mode of delivery (vaginal or cesarean section)

Exclusive breastfeeding practices were assessed based on the WHO definition, where mothers were asked whether they had exclusively breastfed their infants for the first six months, and if not, the reasons for introducing other foods or liquids were documented.

Collected data were analyzed using SPSS v26. Descriptive statistics were used to summarize demographic characteristics, breastfeeding rates, and other relevant variables. Categorical variables were expressed as frequencies and percentages, while continuous variables were presented as means and standard deviations.

Results

Data include 345 participants according to the criteria of the study. The majority of participants in the study were aged between 20-30 years (60.3%), with a smaller proportion under 20 years (9.3%) and over 30 years (30.4%). Most had secondary education or less (68%), while 32% had higher education. Regarding employment status, 59.4% were unemployed, and 40.6% were employed. In terms of socioeconomic status, 40% of participants were from low-income groups, 35% from middle-income, and 25% from high-income. Lastly, 69.6% of deliveries were vaginal, while 30.4% were cesarean sections. (Table 1)

Table 1: Demographic Characteristics of First-Time Mothers (n = 345)

Variable	Frequency (n)	Percentage (%)
Age		
< 20 years	32	9.3%
20-30 years	208	60.3%
> 30 years	105	30.4%
Education Level		
Secondary or less	235	68%
Higher education	110	32%
Employment Status		
Employed	140	40.6%
Unemployed	205	59.4%
Socio-Economic Status		
Low income	138	40%
Middle income	121	35%

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High income	86	25%
Mode of Delivery		
Vaginal	240	69.6%
Cesarean section	105	30.4%

In the study, 58% of participants reported practicing exclusive breastfeeding (EBF), while 42% did not. This indicates that the majority of mothers adhered to exclusive

breastfeeding, but a significant proportion opted for alternative or mixed feeding practices. (Table 2)

Table 2: Prevalence of Exclusive Breastfeeding (EBF) (n = 345)

Exclusive Breastfeeding	Frequency (n)	Percentage (%)
Practiced EBF	200	58%
Did not practice EBF	145	42%

Maternal age significantly impacted EBF, with mothers aged 20-30 years showing the highest rates (65%, p=0.03). Education level was also important, as those with higher education practiced EBF more frequently (70%, p=0.01). Employment status had a notable effect, with unemployed mothers more likely to breastfeed exclusively (69%,

p=0.001). Vaginal delivery favored EBF (64%, p=0.02), while cesarean sections were associated with lower rates. Although socio-economic status had no significant effect (p=0.08), healthcare support was a key factor, with mothers receiving support practicing EBF at a much higher rate (72%, p=0.001). (Table 3)

Table 3: Factors Associated with Exclusive Breastfeeding (n = 345)

Factor	Exclusive Breastfeeding (n, %)	Not Exclusive Breastfeeding (n, %)	p-value
Maternal Age			
< 20 years	13 (40%)	19 (60%)	0.03
20-30 years	135 (65%)	73 (35%)	
> 30 years	52 (50%)	53 (50%)	
Education Level			0.01
Secondary or less	123 (52%)	112 (48%)	
Higher education	77 (70%)	33 (30%)	
Employment Status			0.001
Employed	62 (40%)	78 (60%)	
Unemployed	138 (69%)	67 (31%)	
Mode of Delivery			0.02
Vaginal	155 (64%)	85 (36%)	
Cesarean section	45 (45%)	60 (55%)	
Socio-Economic Status			0.08
Low income	69 (50%)	69 (50%)	
Middle income	75 (58%)	46 (42%)	
High income	56 (65%)	30 (35%)	
Healthcare Support			0.001
Received support	155 (72%)	60 (28%)	
Did not receive support	45 (38%)	85 (62%)	

Mothers aged 20-30 years were 1.8 times more likely to practice EBF (95% CI: 1.1-3.2, p=0.03). Higher education increased the likelihood of EBF by 2.2 times (95% CI: 1.3-4.0, p=0.02), and unemployed mothers were 2.5 times more

likely to breastfeed exclusively (95% CI: 1.6-4.1, p<0.001). Additionally, receiving healthcare support was the strongest predictor, increasing the odds of EBF by 3.1 times (95% CI: 1.9-5.0, p<0.001). (Table 4)

Table 4: Multivariate Logistic Regression Analysis of Factors Associated with EBF (n = 345)

Factor	Adjusted Odds Ratio (AOR)	95% Confidence Interval (CI)	p-value
Maternal age (20-30 years)	1.8	1.1-3.2	0.03
Higher education	2.2	1.3-4.0	0.02
Unemployment	2.5	1.6-4.1	< 0.001
Healthcare support	3.1	1.9-5.0	< 0.001

Among the reasons for not practicing exclusive breastfeeding, the most common was a perceived

insufficient milk supply, reported by 38% of mothers. Returning to work or study accounted for 31% of the cases.

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Breastfeeding difficulties, such as latch issues, affected 14% of mothers, while advice from family or friends influenced 7%. Medical reasons, either maternal or infant-related,

accounted for 5%, as did a lack of breastfeeding knowledge, also reported by 5% of participants. (Table 5)

Table 5: Reasons for Not Practicing Exclusive Breastfeeding (n = 145)

Reason	Frequency (n)	Percentage (%)
Perceived insufficient milk supply	55	38%
Return to work or study	45	31%
Breastfeeding difficulties (e.g., latch issues)	20	14%
Advice from family or friends	10	7%
Medical reasons (maternal or infant)	8	5%
Lack of breastfeeding knowledge	7	5%

Discussion

The findings of this study revealed that the prevalence of exclusive breastfeeding (EBF) among first-time mothers was 58%, which is comparable to other studies conducted in similar settings but still falls short of the WHO's global recommendation that at least 50% of infants be exclusively breastfed for the first six months by 2025. Although the rate is rather encouraging, it shows just how many mothers are not exclusively breastfeeding, meaning that increased challenges to breastfeeding persist even when there are campaigns (13). This research also established that factors promoting EBF amongst first-time mothers include; maternal age, education, employment status, delivery type, and post-birth healthcare access. The chances of EBF in the under 20 years age category were significantly lower than for the 20 to 30-year age group for mothers. This is in line with the earlier findings that suggested that young mothers especially teenage mothers might not possess enough knowledge or self-assurance required to sustain EBF (14). Peer or family influence and the tradition or culture that comes with it also play a role in early cessation. The early and exclusive breastfeeding differentials are more pronounced in mothers aged between twenty and thirty years; these mothers may be more knowledgeable or receive more support regarding the practice. To achieve this there is a need to create awareness for young mothers through additional education and support to enable them to feed their babies appropriately (15). This study established that maternal education was an influential determinant of exclusive breastfeeding, particularly among those mothers with higher education. This study supports the existing literature that educated mothers are more knowledgeable about the benefits of breastfeeding when they encounter any challenge they can overcome easily. It may also be true that educated mother gets more information and support concerning health, which boosts their confidence to practice exclusive breastfeeding. Such results underscore the importance of specific educational campaigns to promote EBF, which is especially important for less-educated mothers (16). The study also exhibited that employment status was the most significant predictor of EBF where unemployed mothers had significantly higher odds than employed mothers. This is a good example of the fact that many women struggle with the question of how to combine work and breast-feeding. One of the highest priorities is the return to work after childbirth as many employers may neither provide adequate maternity leave, let alone the possibility of taking breaks for breastfeeding, nor lack appropriate rooms for expressing milk (17). According to

this survey, 31% of the non-EBF mothers stated that they were forced to return to work as the leading factor. This underscores the need to call for improvements in maternity protection measures like extended paid maternal leave, flexible working, and breastfeeding accommodation in the workplace to help working Mom to continue EBF. The mode of birth also contributed highly to the [breastfeeding] results showing that a greater percentage of the mothers who had normal deliveries exclusively breastfed than those who underwent cesarean sections. This is in line with other previous studies which have shown that CS may delay the start of breastfeeding; skin-to-skin contact and breastfeeding (18). Most women who have had cesarean sections may have more chances of suffering from some physical pains and longer recovery time, this is due to the fact it will increase the challenge of breastfeeding. Addressing these factors may reduce these challenges and thus improve EBF among this group of mothers by providing favorable factors such as; improved breastfeeding support immediately after Cs delivery. The greatest discovery from the study was the relationship of healthcare support to facility-based birth, which was close to being statistically significant. The survey showed that mothers who were counseled and supported on breastfeeding during antenatal and postnatal were over three times more likely to practice EBF than those mothers who did not receive adequate support. This goes to show the importance of the healthcare providers regarding as well as sustaining breastfeeding (19). This research finding is consistent with prior literature emphasizing professional education for healthcare professionals about the need to provide adequate counseling, advice, and post-natal follow-up to support new mothers with breastfeeding. Expansion of EBF, and supplemental nutrition aye be achieved through the adoption B of breastfeeding support programs such as the provision of lactation consultants and breastfeeding classes. There was also a finding of barriers to EBF, with an insufficiency of breast milk being reported by 38 percent of mothers who did not practice EBF. This is a problem that is well known to nursing mums and usually results in the Bambi being given formula or other beverages at this age (20). Lack of information may even fuel such fears further; therefore, recommending standard patterns of feeding and management of issues arising from a low supply of breast milk. Others were; going back to work (31%) and breastfeeding challenges like getting the baby to latch (14%). If increased education, workplace support, and lactation consults were provided, these barriers could be defeated and enable the mothers to continue EBF. There are

certain limitations to this study. It also has the limitation of a cross-sectional study whereby it only reflects breastfeeding practice at the time of study and excludes other subsequent changes. Furthermore, because data were self-reported, recall bias or social desirability bias may be present, particularly concerning exclusive breastfeeding practices among the respondents. Subsequent qualitative follow-up studies are suggested to assess changes in breastfeeding practices over indicated time frames and elicit more comprehensive information about determinants of EBF among first-time mothers.

Conclusion

Exclusive breastfeeding rates among first-time mothers remain suboptimal, with significant factors such as maternal age, education, employment status, mode of delivery, and healthcare support playing key roles in influencing EBF practices. By addressing these factors and removing barriers to breastfeeding, it is possible to enhance EBF rates, ultimately improving This study explored the prevalence and determinants of exclusive breastfeeding (EBF) among first-time mothers, finding that 58% of participants practiced EBF, which aligns with global trends but remains below the recommended levels.

Declarations

Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

Ethics approval and consent to participate.

Approved by the department concerned. (IRBEC-SZWTL-098/23)

Consent for publication

Approved

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Conflict of interest

The authors declared an absence of conflict of interest.

Authors Contribution

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Concept & Design of Study

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