

Original Research Article

Breastfeeding initiation and exclusive breastfeeding practices among postnatal mothers in North Kerala

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Received: 22 October 2025

Revised: 11 November 2025

Accepted: 08 December 2025

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ABSTRACT

Background: Early initiation and exclusive breastfeeding are one of the most effective ways to ensure child's survival, growth and development. Breast milk is the ideal food for infants which helps to protect against many common childhood illnesses and provides all the energy and nutrients that needed for the first months of life. However, only less than half of infants under 6 months old are exclusively breastfed. This study is aimed to assess the early initiation, knowledge and exclusive breastfeeding practices among postnatal mothers in the community of Perinthalmanna, North Kerala.

Methods: A community based cross sectional study was conducted among 146 postnatal mothers with infants aged 0–6 months for a period of 3 months. Data were collected using a structured questionnaire covering socio-demographic details, early initiation of breastfeeding, exclusive breastfeeding and influencing factors. Descriptive analysis was performed using percentages and proportions.

Results: Among 146 participants, 78% initiated breastfeeding within one hour of delivery, out of which 65% practiced exclusive breastfeeding at the time of study. The main reasons for delayed initiation were cesarean delivery and lack of guidance. Mothers with higher education and prior counseling practiced exclusive breastfeeding.

Conclusions: Although breastfeeding initiation rates are satisfactory, exclusive breastfeeding practices remain suboptimal. Health care professionals should provide continuous breastfeeding education and postnatal counseling to mothers, especially first-time mothers which can improve early initiation and exclusive breastfeeding practices.

Keywords: Early initiation of breastfeeding, Exclusive breastfeeding, Kerala, Post-natal counseling

INTRODUCTION

The World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF) recommend initiation of breastfeeding within one hour of birth and exclusive breastfeeding for the first six months of life and further to initiate complementary foods by the same time while continuing breast feeding up to 2 years of age.^{1,2} According to WHO, infants below 6 months is only on breast milk with no other liquid or solids (not even water) except the oral rehydration solution (ORS) wherever necessary, vitamin syrup or drops and medicines.² From the maternal health perspective, many studies have provided evidence on the

impact of EBF (exclusive breast feeding) on maternal health, revealing that breastfeeding for more than 12 months was protective against breast cancer and ovarian cancers and also prevent diabetes mellitus in the long run.³ Also, early cessation or no breastfeeding at all was associated with high risk of maternal postpartum depression. Hence EBF (Exclusive Breast Feeding) has multiple benefits for both the mother and baby.⁴⁻⁶ Common barriers associated with low practice of EBF up to 6 months of life includes maternal employment obstacles, lack of family support, postpartum body shame/ body image disturbance, Insufficient /lack of breast milk, maternal or infant morbidities.^{7,8} Understanding the interconnected set of elements

associated with EBF (Exclusive Breast Feeding) practice in the community will help planning targeted approaches for promoting and scaling up EBF (Exclusive Breast Feeding) for the first six months to meet WHO standards.^{9,10}

Objectives

To determine the prevalence of early initiation of breastfeeding among postnatal mothers. To assess EBF (Exclusive Breast Feeding) practices among mothers with infants aged 0–6 months over a period of 3 months. To identify factors influencing breastfeeding initiation, continuation and cessation.

METHODS

Study design

This was a community based, cross sectional study.

Study place

Conducted in rural field practice areas of Perinthalmanna, North Kerala, under the service coverage area of Taluk Headquarters Hospital, Perinthalmanna.

Study duration

The study duration was from September 2023 to December 2023.

Study population

Postnatal mothers with infants aged 0–6 months residing in the selected communities.

Inclusion criteria

Mothers aged ≥ 18 years, mothers with infants aged 0–6 months, mothers willing to provide written informed consent

Exclusion criteria

Mothers with critically ill infants, mothers with medical contraindications to breastfeeding, mothers unwilling to participate.

Sample size

The sample size of 146 mothers.

Data collection procedure

Data was collected from participants by using a structured questionnaire covering socio-demographic variables, breastfeeding initiation, exclusivity and influencing factors.

Data quality control

The quality of data was assured through appropriate design, proper translation (questionnaire was prepared in English language and translated to Malayalam language and translated back to English language for consistency). The collected questionnaire was examined for consistency and completeness at the end of each interview day.

Ethical approval

Approval obtained from the Institutional Ethics Committee, Taluk Headquarters Hospital, Perinthalmanna (Approval No.: THHPM/IEC/2023/09).

Data analysis

Collected data were entered into Microsoft Excel and each questionnaire were manually checked against the entered data for correctness. Descriptive analysis was used for overall distribution of the study subject and presented as frequency and percentage.

RESULTS

Out of 146 mothers, 78% initiated breastfeeding within one hour of birth, out of which 65% were exclusively breastfeeding their infants at the time of the survey. Cesarean delivery was the most common cause of delayed initiation, followed by maternal fatigue and lack of guidance.

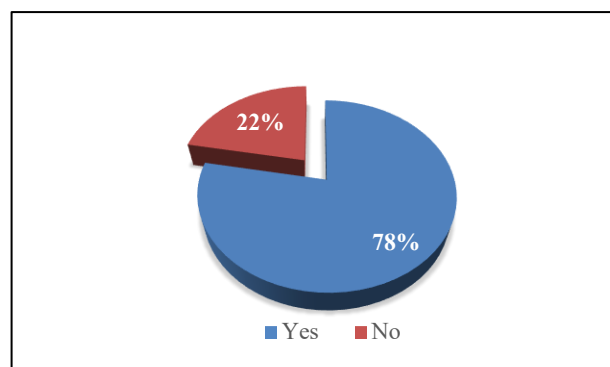


Figure 1: Initiated breastfeeding within 1 hour.

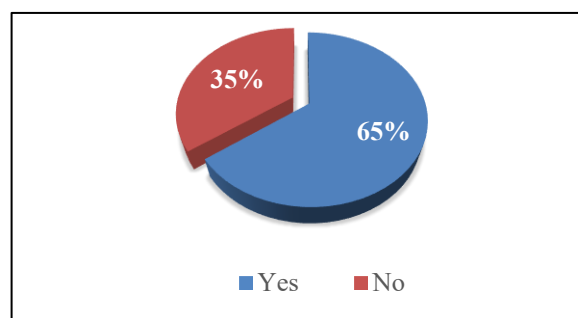


Figure 2: Exclusive breastfeeding for 6 months.

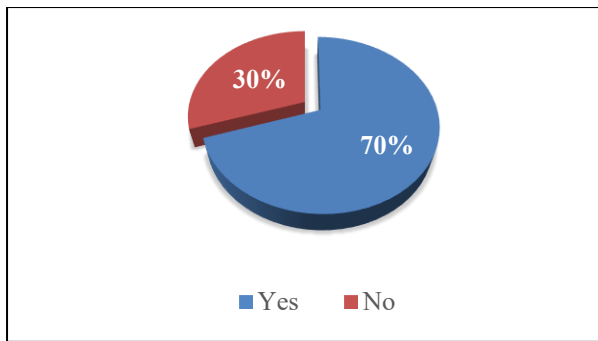


Figure 3: Received breastfeeding counselling in the region.

Mothers who received counseling on breastfeeding during antenatal visits or hospital stay had significantly higher rates of early initiation and exclusive breastfeeding.

Table 1: Demographic profile of study participants.

Variable	Category	N (%)
Age (in years)	<25	38 (26.0)
	25–30	66 (45.2)
	>30	42 (28.8)
Education	Primary	21 (14.4)
	Secondary	59 (40.4)
	Higher secondary	41 (28.1)
	Graduate above	25 (17.1)
Mode of delivery	Vaginal	87 (59.6)
	Cesarean	59 (40.4)
Parity	Primipara	72 (49.3)
	Multipara	74 (50.7)

Table 2: Breastfeeding practices among postnatal mothers (n=146).

Practice	Number of mothers	%
Initiated breastfeeding within 1 hour	114	78
Exclusive breastfeeding for 6 months	95	65
Received breastfeeding counselling	102	70

DISCUSSION

The study found 78% early initiation, similar to NFHS-5 Kerala data (~75%).¹¹ However, EBF practice was 65%, lower than Kerala's reported 70% and WHO recommendations. The present study that was performed to understand initiation of breastfeeding and exclusive breastfeeding practices among Indian mothers, reveals satisfactory rates of breastfeeding initiation but a decline in exclusive breastfeeding up to 6 months. Similar trends have been observed in other Indian studies, where cultural beliefs, maternal employment and cesarean

delivery were the barriers to sustained exclusive breastfeeding. Concerning the support system, first time mothers who had support of their husband and family were more likely to practice exclusive breastfeeding than those who didn't have.

A study in rural Tamil Nadu reported 74% early initiation and 62% EBF similar to our findings.¹² Subramanian et al, reported that maternal education strongly influences EBF consistent with our results.¹³ Studies have shown that cesarean section is a strong barrier to early breastfeeding.¹⁴ which aligns with our observation that C-section accounted for over half of delayed initiation cases. Lack of family/social support was identified as an important determinant, supported by findings from Jelly et al.¹⁵

Health education by ASHA (Accredited Social Health Activist) workers and antenatal/postnatal counseling play an important role in improving breastfeeding rates. Integrating breastfeeding promotion into maternal and child health programs and community outreach activities can further enhance outcomes.

Cross-sectional design restricts causal interpretations. Self-reported data may introduce recall bias. Study limited to one geographical area, reducing generalizability.

CONCLUSION

Early initiation of breastfeeding among mothers in North Kerala is satisfactory; however, exclusive breastfeeding remains below optimal levels. The study highlights the influence of delivery mode, maternal education, counselling and family support on breastfeeding practices. Strengthening lactation counselling, ensuring guidance post-cesarean delivery and involving husbands/family members can significantly improve EBF rates. This study contributes localized evidence essential for strengthening maternal-child health policies in Kerala. Most of mothers practiced early breastfeeding but there were mothers who started additional food/drinks before six months of age and water was the most given either to quench their thirst or to ease the stomach-ache.

Hence, healthcare professionals should provide continuous breastfeeding education and counselling to mothers, especially first-time mothers with a prime focus on early initiation and exclusive breast-feeding practices, avoidance of pre-lacteal feeding and colostrum discarding. Mothers should be supported properly regarding low secretion of breast milk and early initiation of breastfeeding after cesarean delivery. Husbands also counselled on how to support their lactating partner.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Chalil HP. Breastfeeding initiation and exclusive breastfeeding practices among postnatal mothers in North Kerala. *Int J Contemp Pediatr* 2026;13:196-9.