

Knowledge, attitude, and practice of breast feeding mothers in a tertiary care centre: a descriptive study

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Abstract

Objective: Child feeding practices, including breastfeeding, affects the nutritional status of children under two years of age. Maternal knowledge and comfort of breastfeeding are factors that predict the feeding outcomes. The current study was designed to assess the knowledge, attitude, and practice regarding breastfeeding of mothers attending the outpatient department and Immunization clinic of a tertiary center in Kerala. **Methods:** This descriptive, cross-sectional study was conducted from August 2015 to October 2015. The study subjects included all eligible mothers with infants between 6 months to 1 year of age visiting the outpatient department and immunization clinic during the study period. **Results:** All participants had knowledge that child should be breastfed, but only 73% had knowledge about exclusive breastfeeding. In this study, more than half of the participants (62.5%) initiated breastfeeding within one hour of delivery. Only one-third of the participants practiced exclusive breastfeeding for more than 6 months. **Conclusion:** The present study shows that breastfeeding behavior among the study population is still far from optimal.

Keywords: Breastfeeding, Child feeding, Breastfeeding practice, Child health

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Introduction

Exclusive breastfeeding is very important for the health of both mother and the newborn. Exclusive breastfeeding for the first six months aids in optimal growth and development of the child. Mothers can continue breastfeeding for up to two years, while also giving nutritionally rich and safe supplementary foods. Studies show an increased risk of mortality due to diarrhea and other infections in children who are not breastfed or was partially breastfed [1].

Child feeding practices, including breastfeeding, affects the nutritional status of children under two years of age. In India, low nutritional status is one of the important cause of deaths in children under 2 years of age [2]. Over 15% of child deaths are associated with feeding practices, particularly in the first year of life of the child. Studies report that 13% of the deaths can be prevented by early and exclusive breastfeeding [3]. Poor feeding practices

and poor attitude towards breastfeeding are some of the major reasons for poor nutritional outcome in children. Thus, appropriate and timely promotion of good practices and attitude are important, especially in countries with high disease burden.

Good breastfeeding practices may be affected by many social, cultural, and economic factors. Urbanization and employment of lactating mothers have led to a slight decline in breastfeeding practices. This is true in India too, as shown in a study conducted in Delhi [4]. Attitude of mothers towards breastfeeding influences breastfeeding practice, with negative attitude forming a barrier for the initiation and continuation of good feeding practices. For better success and continued breastfeeding practices among mothers, maternal positive attitude and knowledge are crucial.

Three basic strategies that can bring about a favorable change in the behavior of mothers towards feeding habits are information, education, and

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communication. Maternal knowledge and comfort of breastfeeding are factors that predict the feeding outcomes. In India, the main source of information for mothers still remain family and friends, and a structured counseling service on child feeding is lacking[5]. Promoting and protecting the good breastfeeding practices can indirectly benefit the nutritional status of children.

Awareness of the importance of good feeding attitude and practice can help in improving the overall behavior of the lactating mother. Inadequate support to the mothers may lead to premature cessation of breastfeeding. Education and support for breastfeeding are thus key for good practices. Education can be provided by doctors, nurses, midwives or counselors, particularly during prenatal period or immediately after delivery.

The support should be continued at home by mothers or family members to facilitate good breastfeeding practice. This is especially true of families belonging to low socioeconomic strata.

Appropriate support, both pre-natal and post-natal, can promote positive feeding outcomes, improved rates of exclusive breastfeeding, and better maternal-child bonding. A number of regional and social factors affect the perception and attitude of mothers towards good feeding practices.

Thus, studies assessing the different variables of a region are important for better understanding of the possible promotional interventions. This will help in developing a structured, comprehensive, and

Results

Sociodemographic characteristics- Two hundred eligible mothers participated in this observational study. Majority of the participants were in the age group of 20-30 years (68.5%), were unemployed (87%), were residing in Panchayath area (97%), and had secondary level education (72%). Sociodemographic characteristics of the participants in the study are given in **Table 1**.

Knowledge about breastfeeding- All 200 participants of the study (100%) had knowledge that child should be breastfed, but only 73% had knowledge about exclusive breastfeeding. Regarding immediate initiation of breastfeeding after delivery, 55% of the participants responded that they were aware.

Majority of mothers had knowledge that night feeding is needed (81.5%), and about the advantages of breastfeeding (66%).

Regarding the need to give colostrum, only 46% were aware of it, while 54% did not know about it. About three-fourths of the mothers in the study (73.5%) did not know that pre-lacteal feed should be avoided, while 26.5% were aware. More than half of the participants (61.5%) did not know about the dangers of bottle feeding (**Table 2**).

culturally suitable promotional service that is apt for a particular region. The current study was designed to assess the knowledge, attitude, and practice regarding breastfeeding mothers attending the outpatient department and Immunization clinic of a tertiary center in Kerala.

Methodology

Type and place of study: This descriptive, cross-sectional study was conducted in the outpatient department of a tertiary medical center from August 2015 to 31st October 2015.

Sampling and inclusion criteria: The study subjects included all eligible mothers with infants between 6 months to 1 year of age visiting the outpatient department and immunization clinic during the study period. Legal permission was obtained from the institutional review board and a verbal consent was obtained from all participants.

Exclusion criteria: Mothers with preterm babies, congenital malformation that affects feeding and infants who were not accompanied by the mother were excluded from the study.

Statistical Analysis: Attitude and practices were evaluated by appropriate parameters in the questionnaire. The information thus obtained were compiled, tabulated and analyzed statistically to draw out observations and meaningful conclusions. Data were analyzed using SPSS 16. Dichotomous variables were compared using percentage values and chi-square tests ($p < 0.05$).

Table-1: Sociodemographic characteristics of study participants.

Characteristics		Percentage
Maternal age (years)	≤20	10.5
	21-30	68.5
	≥31	21
Maternal education	Primary	7
	Secondary	72
	Graduate	21
Occupation of mother	Employed	13
	unemployed	87
Residence	Panchayath	97
	Municipality	3
Sex of the child	Male	58
	Female	42

Table-2: Knowledge of participants about breastfeeding.

Maternal knowledge Variable	Yes		No	
	Frequency	%	Frequency	%
Have to breastfeed	200	100	-	-
Initiation of breastfeeding in the 1st hour after delivery	110	55	90	45
About exclusive breastfeeding	146	73	54	27
Need for night feeding	163	81.5	37	18.5
Advantages of breastfeeding	132	66	68	34
Colostrum should be given	92	46	102	54
Prelacteal feed should be avoided	53	26.5	147	73.5
Dangers of bottle feeding	77	38.5	133	61.5

Breastfeeding practices among participants- In this study; more than half of the participants (62.5%) initiated breastfeeding within one hour of delivery. Less than 20% of the mothers (17.5%) started breastfeeding 4 hours after delivery. Only one-third of the participants practiced exclusive breastfeeding for more than 6 months.

About three-fourths of the participants in the study (74%) had not given animal milk, while two-thirds had not resorted to any type of formula feeding to the child. Nearly all (99%) of them gave prelacteal feeds to children. Only 15% of the respondents felt that breast milk was less or sufficient (**Table: 3**)

There was no significant association between the educational status of the mother and practice of exclusive breastfeeding (0.84; $p < 0.05$). Similarly, the occupation of the mother also did not have a significant relation with exclusive breastfeeding (0.68, $p < 0.05$).

Attitude of participants towards breastfeeding- More than half of the respondents (65%) believed in exclusive breastfeeding for their child.

Majority of mothers (64%) were not comfortable to give any other feed other than breast milk for their children. But, a good percentage of the participants (54%) did not consider colostrum as an important part of breastfeeding. Moreover, 73.5% did not think that prelacteal feed should be avoided.

Table-3: Breastfeeding practices of the participants in the study.

Breastfeeding Practice	Frequency	Percentage
Initiation of breastfeeding		
<1 hour	125	62.5
1-4 hours	40	20
>4hours	35	17.5
Exclusive breastfeeding		
<6 Months	130	65
>6 Months	70	35
Formula feeding		
Given	75	37
Not given	125	64
Feeding of animal milk		
Given	52	26
Not given	148	74
Pre-lacteal feeds		
Given	198	99
Not given	2	1
Colostrum		
Given	194	97
Not given	6	3
Feeling of less milk		
Yes	29	15
No	171	85

Discussion

This study investigated the knowledge, practices, and attitude regarding breastfeeding in mothers. All the respondents in the study had prior knowledge about breastfeeding and the majority of them were aware of exclusive breastfeeding. As per the National family health survey, 53.3% of the newborns in Kerala is exclusively breastfed [6]. The findings of our study are higher when compared to other studies [7-11]. But the percentage respondents is still lower when compared to the study conducted in a rural area in West Bengal [12].

Table-4: Breastfeeding practices in other studies.

	Current study	Chaudhuri et al., 2011 [7]	Shaili et al., 2012 [8]	Shashank and Chethan, 2016 [11]	Vijayalakshmi et al., 2015 [10]	Chattopadhyay et al., 2013 [12]	Hiremath et al., 2013 [9]
Exclusive breastfeeding	35	23.5	5.13	32	27	58.7	27.1
Initiation within one hour	62.5	41.5	21.37	37.41	36.9	34.2	5.1
Prelacteal feeds	99	10	61.8	29.5	Not recorded	42.1	66.1
Colostrum feeding	97	95	87.18	76.61	96.7	76.3	72

Table 4 gives a comparison of values from different studies. The current study shows 35% of the children to be exclusively breastfed, although 73% of the respondents had knowledge of this practice. This difference in knowledge and practice has been reported in other studies from India and abroad[10]. Exclusive breastfeeding, though practiced, was not continued for more than six months in many cases[13,14].

These stresses the importance of counseling in ante-natal care for better practices in feeding newborns. Ante-natal care and advice are equally important in preparing and continuing exclusive breastfeeding for more than six months. Studies report a low prevalence of exclusive breastfeeding at six months in some low resource countries [15,16].

Studies from developing countries show that lactating mothers are knowledgeable about exclusive breastfeeding [17, 18]. Most of the mothers agree that breastfeeding should be continued until the age of 2 years. A study from India reported that mothers had a low attitude score towards some of the variables like lack of iron in breastmilk, and increased chances of overfeeding with formula feeding[10]. Promotional interventions that focus on improving breastfeeding practices should also hit upon these attitudes for better penetration.

World Health Organization (WHO) recommends breastfeeding to be initiated, preferably, within half an hour of delivery[19]. Early initiation is known to boost oxytocin reflexes which in turn will improve breast milk reflex. In the India, the rate of early breastfeeding initiation ranges from 16%-54.5%[20]. Among the respondents in the current study, though 55% perceived initiation within an hour of delivery to be good, a higher percentage (62.5%) actually practiced early initiation. This is higher than other comparative studies mentioned in **Table 4**.

A study conducted in India observed delay in shifting mothers from labor room, Caesarean section, family restrictions and babies being in neonatal ICU as the main reasons for not initiating breastfeeding earlier[10]. Increasing the awareness about initiating breastfeeding early will go a long way in improving this practice among mothers.

About 35% of the respondents in the current study started supplementary feed before six months. Some of the reasons for this may be the feeling of insufficient milk production and the belief that breast milk alone is inadequate for the growth of the child. Insufficient milk supply is reported as the main reason for women to start the supplementary feed [10, 21]. Promotional interventions for improving breastfeeding practices will help in changing the present attitude and behavior. Studies have shown that such interventions can enhance the rate of exclusive breastfeeding by six-fold[22].

Maternal knowledge and education are considered to be one of the determinant factors in good breastfeeding practices[23]. About three-fourths of the respondents were educated to secondary level and had minimal knowledge gap with respect to breastfeeding. But nearly all (99%) of them gave prelacteal feeds to children. This is quite alarming, considering the fact that it cannot be attributed to lack of literacy among mothers. Customs, traditional practice in the region and relative's advice may be the factors leading to the high percentage of prelacteal feeding. Another study from India did report illiterate lactating mothers as having a better positive attitude towards breastfeeding when compared to literate mothers[10]. Similar results were obtained from Jordan, where women with higher education level were less likely to breastfeed when compared to less educated and illiterate mothers[24]. This result is important from an awareness point of view as a positive attitude is directly correlated to optimal exclusive breastfeeding practice among mothers[25]. It shows that ante-natal counseling plays an important role in channelizing mothers toward better breastfeeding practices.

A total of 92 (46%) respondents perceived that giving colostrum to be a good practice, though a higher percentage (97%) actually gave colostrum to the newborn. This is on par or higher than the values given in other comparative studies (**Table 4**). A larger sample size would enable generalization of the results. More studies with large sample size and qualitative factors will help in identifying the barriers that hinder optimal breastfeeding practices among lactating mothers. Studies should also focus on the perceptions of the post-natal healthcare providers to throw light on the cultural and social belief systems that affect newborn feeding.

Conclusions

Most of the respondents in our study had good knowledge and positive attitude towards breast-feeding. But the knowledge should be treated with caution as appropriate practice is still low. The present study shows that breastfeeding behavior among the study population is still far from optimal.

National strategy components for the support of breastfeeding in terms of early initiation during the first hour and implementing the baby-friendly hospital initiative has to be reinforced strongly in the region. This will require greater involvement from obstetricians and Accredited Social Health Activist (ASHA) workers.

What this study adds to existing knowledge- The present study shows that even when the maternal population has knowledge and attitude, special attention has to be given to the practice of breastfeeding. The region lacks optimal breastfeeding behavior and care should be taken to reinforce the strategy. Ante-natal care, counseling, and advice are important in preparing the expectant moms for the best practices in feeding newborns.

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Noushadali interpreted the data and edited and revised the manuscript. All authors approved the final manuscript.

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