

Original Research Article

Awareness of breast feeding practices amongst women visiting government hospital at Ahmedabad

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ABSTRACT

Background: Breastfeeding plays a very vital role in the overall health and development of a child. Breast milk has all the necessary nutrients required for the growth and well being of the child. It has been shown to have a protective role against various infectious and non-infectious diseases. The key elements are initiation of breastfeeding, exclusive breastfeeding for the first 6 months of life and continued breastfeeding for 2 years along with other sources of nutrition.

Methods: A questionnaire based cross sectional study was conducted at a tertiary care teaching hospital. Mothers with children less than 10 years of age were included in the study.

Results: Out of 150 women who were included in the study, maximum (59.33%) were in the age group of 19-26 years with the mean age being 25.7 years. 20% of women were illiterate, and a majority of them (68%) were Hindu. 115 (76.66%) mothers gave colostrum to the newborns, whereas 35 (23.33%) discarded colostrum. Also, 44% of mothers gave pre-lacteal feeds, whereas 56% of mothers didn't give pre-lacteal feeds. A significant association between initiation of breastfeeding was found with education, $X^2=12.63$ ($p<0.01$).

Conclusions: Our study concluded that initiation of breastfeeding within the first hour of life and colostrum feeding in the study population was lower than the WHO recommendation. Prelacteal feeding is still being practiced extensively, and that educated mothers are more likely to initiate breastfeeding within one hour of life.

Keywords: Exclusive breastfeeding, Prelacteal feeds, Colostrum, Breastfeeding awareness

INTRODUCTION

To ensure child survival and adequate development, breastfeeding is one of the most effective ways. It provides all the required energy for the first months of life, about a half of total requirement in the second half of infancy and one-third during the second year of life.¹ WHO and UNICEF recommend mothers worldwide to initiate breastfeeding within an hour of birth and exclusively breastfeed for six months, gradually add nutritious food and continue to breastfeed until two years or beyond. Infants should be breast fed on demand that is as often as the child wants, day and night. Bottles, teats,

or pacifiers should not be used.² Usually, the decision to breastfeed or to bottle-feed is usually made before pregnancy. The most common reasons for choosing breast-feeding are benefits to infant, naturalness and emotional bonding. The most common reason for bottle feeding are; mother's perception of father's attitude, uncertainty regarding the quantity of breast milk, and return to work.³

There has been a convincing data that suggests that breastfeeding decreases gastrointestinal illnesses, otitis media, respiratory tract infections, and neonatal necrotizing enterocolitis among infants and children. It

reduces the period of postpartum infertility and premenopausal breast cancer in the mother. In addition to this, some studies show probable benefits like reduction of asthma, allergy, some childhood leukemias, sudden infant death syndrome, obesity, etc. in infants and children with a decrease in ovarian cancer in mothers.⁴

According to WHO, only 41% of infants under 6 months of age are exclusively breastfed. Globally, 3 in 5 babies are not breastfed in the first hour of life. Nearly two out of three infants are not exclusively breastfed for the recommended six-month duration—a rate that has not improved in two decades. Over 820 000 children could be saved yearly if all children 0-23 months were optimally breastfed.² To promote and support breastfeeding, WHO and UNICEF jointly started the Baby-Friendly Hospital Initiative (BFHI) in 1991, to ensure that all maternities, whether free-standing or in a hospital, become centres of breastfeeding support. Since the BFHI began, more than 15,000 facilities in 134 countries have been awarded Baby-Friendly status.⁵

National Family Health Survey-2015-16 (NFHS-4) in India showed that only 42.6% of mothers initiate breastfeeding within one hour of birth, and 54.9% of children were exclusively breastfed during the first six months of life.⁶ With neonatal mortality of 24.6 at the community level in India, common traditional feeding practices associated with early introduction of water, juice, honey, jaggery, ghee, ghutti hinder exclusive breast-feeding. We continue to have high neonatal (22.73) and under-5 (36.6) mortality rates.⁷ As breastfeeding is culturally accepted, it seems an efficient way to improve health and nutrition with proper education to the mother and the family.

Taking this into consideration, this study was carried out with the aims and objectives of determining awareness regarding breastfeeding amongst mothers visiting a government setup.

METHODS

This observational study was conducted at a tertiary care teaching hospital, Sheth LG hospital from 1 July 2016 to 31 August 2016 after obtaining permission from the head of department obstetrics and gynecology, head of department of preventive and social medicine, and Sheth LG hospital. Mothers as per the inclusion criteria were identified over the decided time-period in the in-patient and out-patient department.

Inclusion criteria was parous women with child age <10 years. Exclusion criteria were nulliparous women and women with child >10 years. Written informed consent was taken in their vernacular language-Hindi/English/Gujarati. The details of the patient were recorded with the utmost confidentiality in the questionnaire prepared by the investigators. All the

information was entered into an excel worksheet and analyzed. A chi squared test was used as a test of significance. $p < 0.05$ was considered statistically significant.

RESULTS

Feeding of colostrum

In our study, 115 (76.66%) mothers gave colostrum to the newborns whereas 35 (23.33%) discarded colostrum. 74.15% of mothers in the age group of 19-26 years gave colostrum, while 80.32% in age group of 27-34 gave colostrum. 79% of literate mothers gave colostrum, whereas, amongst the illiterate mothers, 67.67% gave colostrum. 76.4% Hindu, 73.17% Muslim and 100% of Christian mothers gave colostrum. No significant association between feeding of colostrum was found with age/education ($p > 0.05$) (Table 1).

Feeding of pre-lacteals

In our study, 44% of mothers gave pre-lacteal feeds, whereas 56% of mothers didn't give pre-lacteal feeds. 50.56% of mothers in the age group of 19-26 years gave pre-lacteal feed, 34.42% in age group of 27-34 years gave pre-lacteal feeds. 45.83% of literate mothers gave pre-lacteal feeds, whereas, amongst the illiterate mothers 36.66% gave pre-lacteal feeds. 49.01% Hindu, 34.14% Muslims and 28.57% Christian gave pre-lacteal feeds. No significant association between the feeding of pre-lacteal was found with age/education (Table 1).

Initiation of breast-feeding

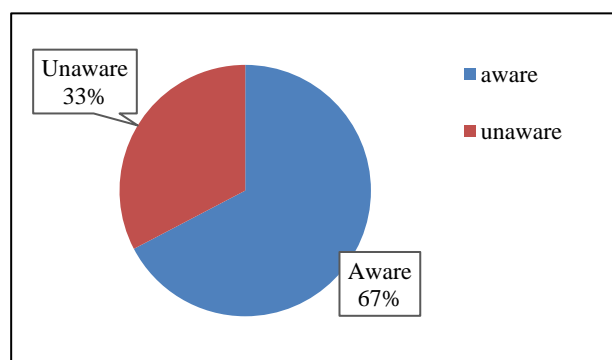
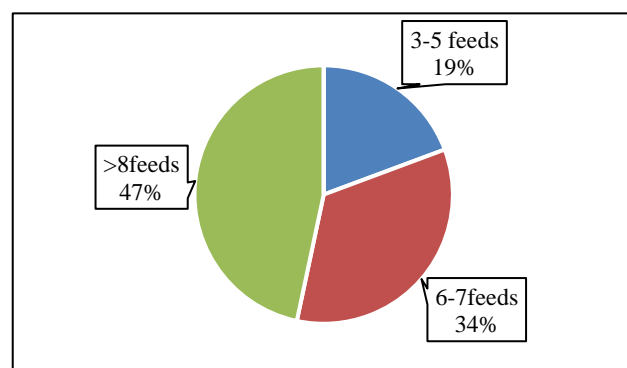
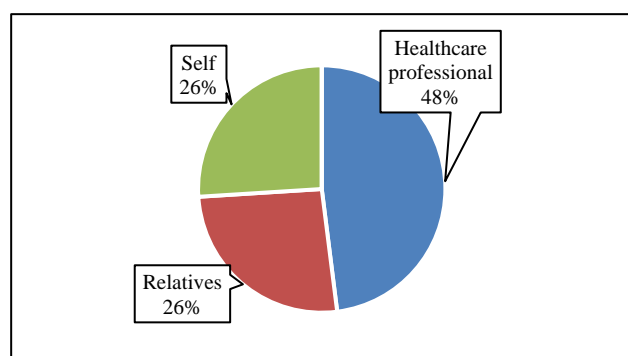
46% of mothers initiated breast-feeding within 1 hour, 23.33% with 1-6 hours and 30.67% initiated breast-feeding beyond 6 hours. 44.94% mothers in age group of 19-26 initiated breastfeeding within 1 hour, while 47.54% in age group of 27-34 years initiated in less than 1 hour. 51.66% of literate mothers initiated breast-feeding within 1 hour whereas 23.33% of illiterate mothers initiated breast-feeding within 1 hour. Significant association between initiation of breast-feeding was found with education, $X^2 = 12.63$ ($p < 0.01$) (Table 1).

54.90% Hindu, 17.07% Muslims, 85.71% Christian initiated breast-feeding with 1 hour. 67.33% of mothers were aware of the fact that they should continue to breast-feed if the baby was unwell, while 33.33% believed they should stop breast-feeding (Figure 1).

The doctors, nurses, and healthcare staff were majorly (48%) responsible for spreading the information regarding breast-feeding practices followed by relatives (26%) and self awareness (26%) (Figure 2). 47% of mothers fed for more than 8 times/day, 34% of mothers fed for 6-7 times/day, and 19% fed for 3-5 times/day (Figure 3).

Table 1: Correlation of mother's characteristics with feeding of colostrums, prelacteal feeds and initiation of breastfeeding.

Characteristics	Colostrum given		Prelacteal feed		Initiation of breast feeding		
	Yes (n=115) (76.66%)	No (n=35) (23.33%)	Yes (n=66) (44%)	No (n=84) (56%)	<1 hour (n=69) (46%)	1-6 hours (n=35) (23.33%)	>6 hours (n=46) (30.67%)
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Age of mother in years							
19-26 (n=89)	66 (74.15)	23 (25.84)	45 (50.56)	44 (49.43)	40 (44.94)	24 (26.96)	25 (28.08)
27-34 (n=61)	49 (80.32)	12 (19.67)	21 (34.42)	40 (65.57)	29 (47.54)	11 (18.03)	21 (34.42)
Total (n=150)	X ² =0.77 (p>0.05)		X ² =3.82 (p>0.05)		X ² =1.76 (p>0.05)		
Education of mother							
Literate (n=120) (80%)	95 (79)	25 (20.83)	55 (45.83)	65 (54.16)	62 (51.66)	29 (24.16)	29 (24.16)
Illiterate (n=30) (20%)	20 (67.67)	10 (33.33)	11 (36.66)	19 (63.33)	7 (23.33)	6 (20)	17 (56.66)
Total (n=150)	X ² =2.09 (p>0.05)		X ² =0.81 (p>0.05)		X ² =12.63 (p<0.01)		
Religion							
Hindu (n=102) (68%)	78 (76.4)	24 (23.52)	50 (49.01)	52 (50.98)	56 (54.9)	18 (17.64)	28 (27.45)
Muslim (n=41) (27.33%)	30 (73.17)	11 (26.82)	14 (34.14)	27 (65.85)	7 (17.07)	17 (41.46)	17 (41.46)
Christian (n=7) (4.66%)	7 (100)	0 (0)	2 (28.57)	5 (71.42)	6 (85.71)	0 (0)	1 (14.28)
Total (n=150)							

**Figure 1: Awareness about breastfeeding when baby is unwell.****Figure 3: Number of breastfeeds per day.****Figure 2: Source of information.**

DISCUSSION

In this study, knowledge about breastfeeding practices was ascertained among 150 urban women coming to the tertiary care government teaching hospital for the delivery of the baby. It was found that out of 150 women, maximum 89 (59.3%) were in the age group of 19-26 years with the mean age being 25.7 years. Maximum (68%) number of women were Hindu.

In our study, 20% of women were illiterate. This is lower than the study done by Raval et al in which 32.1% of the women were illiterate.⁸ This can be due to different study settings. In our study, a maximum (48%) number of

women reported the doctors/nurses/healthcare workers as sources of information regarding breastfeeding during the antenatal visits. This is in contrast to the study done by Mohapatra et al in which maximum women (36.4%) reported their mothers as main sources of information regarding breastfeeding.⁹

According to the WHO, 60% of newborn babies are not breastfed in the first hour of life.¹ In our study, it was found that this percentage was comparable at 54%. 76.67% of the women in our study gave colostrum to the baby, while the WHO recommends that all women (100%) must give colostrum in the absence of specific contraindications.¹⁰ It was observed in our study that there is a strong correlation between the literacy of mothers and the initiation of breastfeeding within 1 hour of birth ($p < 0.01$). Reasons such as limited openness to new ideas or information and grandparents' belief system can be attributed to this finding. While prelacteal feed administration or discarding of colostrum are dictated by the belief system of family and parents in developing countries, education regarding the initiation of breastfeeding is more likely to be adopted and put into practice by a literate mother. It was also observed that reception to new information was better among educated mothers. This is in confirmation of an analysis done by Acharya et al of data from three consecutive Nepal Demographic and Health Surveys.¹¹ This result was also observed in a study done by Lawan et al in Nigeria which had a similar study setting.¹²

There is no correlation between the literacy of the mother and giving prelacteal feed ($p > 0.05$) for the same reason. This is in line with a study done in Southern Ethiopia by Amele et al in which it was found that mothers living in extended family type were 10 times more likely to give prelacteal feeding than mothers who live in nuclear family type.¹³

In our study, only 17.07% of Muslim mothers initiated early breastfeeding whereas this percentage was higher among Hindus (54.90%) and Christians (85.71%). Similar results were seen in a study conducted in Niger by Horii et al.¹⁴ In that study, Koranic education or informal education were found to be deterrents to early initiation of breastfeeding. In a study done by McKenna et al, it was concluded that the feeding of sweets to newborns in Hindu and Muslim communities are deeply rooted in cultural and religious practices.¹⁵ Likewise, it was found in our study that 49.01% Hindu women and 34.14% Muslim women gave prelacteal feed to the newborn babies.

In our study, only 46.66% of women were aware that they had to feed the baby at least 8 times a day. However, it is beyond the scope of this study to assess the knowledge of mothers about on demand feeding. In a study done by Breakey et al, it was concluded that mothers may be able to modulate milk compositions to address the needs of the infants.¹⁶ Accordingly, it is recommended that women

continue to breastfeed even when the baby is unwell. 67.33% of women in our study were aware of the same. In a study done in Ethiopia by Woldegebriel, it was found that the majority (91%) of mothers suggested not to breast feed when the child gets sick.¹⁷

Limitations

This study was unable to ascertain if knowledge of mothers about breastfeeding and breastfeeding practices evolve with increasing birth order. As sample size of this study is small, more studies need to be performed to ascertain the practices regarding breast feeding in western part of India

CONCLUSION

Our study concluded that initiation of breastfeeding within the first hour of life and colostrum feeding in the study population was lower than the WHO recommendation. Prelacteal feeding practices are still carried out despite patient education. Factors such as extended family type and cultural beliefs could be responsible for this observation. This study concludes that educated mothers are more likely to initiate breastfeeding within one hour of child's birth.

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