

■ *Original Article*

Knowledge and practice of mothers regarding breast feeding: a hospital based study

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Abstract

Background: Although breastfeeding is a common practice in Nepal, proper breastfeeding is on the decline due to several factors. The impact of knowledge about breastfeeding practice, i.e., duration of breastfeeding, proper techniques, proper time of weaning is poorly understood. **Objective:** To assess the knowledge and actual practices of mothers regarding breastfeeding. **Methods:** Cross sectional study was carried out on 200 mothers of under 1 year old children who attending the pediatric Out Patient Department, well baby clinic and immunization clinic at BPKIHS, Dharan. Mothers were interviewed using pre-designed questionnaire. **Result:** All mothers knew that they had to breast feed their babies, but they did not have adequate knowledge about the appropriate way of breastfeeding. 10% knew that they have to initiate breast feeding within ½ hour of birth, 10% had idea on prelacteal feed, 25% had idea on importance of colostrums, 15% knew the meaning of exclusive breast feeding, and 15% of the mothers had idea on importance of night feeding. 41.5% mothers initiated breast feeding within ½ hour of birth, 33% mothers gave prelacteal feed, colostrum was fed by 95%, 15% were practicing exclusive breast feeding, 90% mothers were practicing night feeds, 15% mothers practiced feeding one side at a time, 60% mothers were practicing inappropriate attachment and positioning, None of the mothers got any advice regarding breast feeding during ANC visits. **Conclusion:** Undesirable cultural practices such as giving prelacteal feeds, late initiation of breastfeeding after birth, delay in introduction of weaning foods and avoiding exclusive breastfeeding are still prevalent among the mothers. The maternal knowledge towards breast feeding was inadequate and there was a big gap between actual and desired practices.

Keywords: breast feeding, colostrum, weaning,

Introduction

After birth the health of the baby depends upon the nurturing practice adopted by the family. The ideal food for the young infant is human milk which has the specific characteristics that match the growing infants' nutritional requirements.

Breastfeeding is a socially constructed and controlled practice.¹ It is often presented as a natural practice,

sadly corrupted and curtailed by cultures. The Innocenti Declaration of 1990 August, Florence, Italy presents breastfeeding as best practice for mothers and babies. As a global goal for optimal maternal and child health and nutrition, all women should be enabled to practice exclusive breastfeeding, and all infants should be fed exclusively on breast milk, from birth to 6 month of age (March 2001).² Breastfeeding is nearly universal in Nepal and the median duration of breast-feeding is long (33 months).³ But on the contrary to the recommendations of WHO only 2/3rd of children less than 6 months of age are

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exclusively breast fed.³ Numerous barriers to breast-feeding like lack of accurate information and lack of appropriate knowledge among the population in general have been identified. According to a published survey⁴, a major barrier to successful in-hospital breast-feeding is inconsistency in information and nursery practices related to breastfeeding management. This study was carried out based on the fact that knowledge of mothers and their appropriate practice regarding breastfeeding is limited, then focusing on women's point of view towards breast-feeding.

Methods

A cross sectional study was carried out in pediatric OPD and immunization clinic of BPKIHS. The study subjects were lactating mothers having children aged under 1 year of age, who attended their children for vaccination and for the treatment of other minor illnesses. The purposive sampling technique was used to select the study subjects. Information regarding patients' demographics, knowledge and practice towards breastfeeding were collected from these mothers on a pre-designed and pretested proforma. Before collecting the information, permission was taken from the institute authority and verbal consent was taken from the respondents. The data was entered in SPSS 10.5 software package and analyzed.

Results

The results of this study are presented in the below mentioned tables and figures.

Characteristics

200 respondents considered for this study were mothers of children under one year of age. The background characteristics are shown in table 1. Table 2 shows the age and sex distribution of the children.

Table 1: Participants' characteristics
n = 200

S.N.	Background	Frequency	Percent
1.	Age (Years)		
	15 - 25 yrs	132	66.0
	25 - 35 yrs	59	29.5
	35 - 45 yrs	9	4.5
	Mean Age: 23.93 Years		

2.	Education completed		
	Illiterate	41	20.5
	Literate	3	1.5
	Less than high school	127	63.5
3.	More than high school	29	14.5
	Occupation		
4.	Housewife	188	94.0
	Employed	12	6.0
5.	Religion		
	Hindu	196	98.0
	Muslim	3	1.5
	Christian	0	0.0
6.	Buddhist	1	0.5
	Place of residence		
7.	Urban	50	25.0
	Rural	150	75.0
8.	Number of children		
	One	115	57.5
	Two	53	26.5
	Three	23	11.5
9.	Four	9	4.5
	Place of delivery		
	Home	112	56.0
	Health centre	21	10.5
	Hospital	67	33.5

Table 2: Biological Characteristics of Children
n = 200

S.N.	Variables	Frequency	Percent
1.	Sex		
	Male	113	56.5
2.	Female	87	43.5
	Present age (in Month)		
	<6 month	45	22.5
	6 - 12month	155	77.5

Knowledge of breastfeeding

Mother's knowledge on various aspects of breastfeeding was seen. Appropriate knowledge was not adequate.

Table 3: Mothers' knowledge of breastfeeding

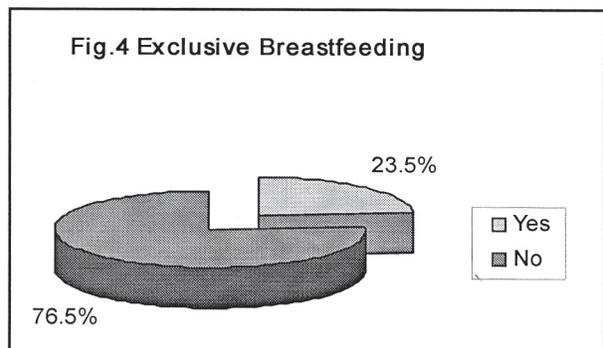
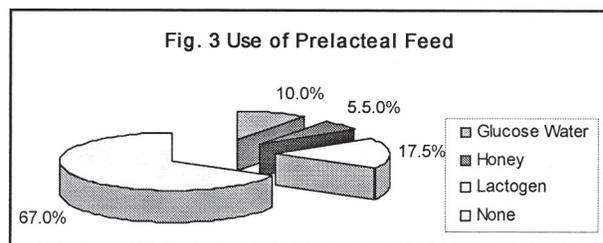
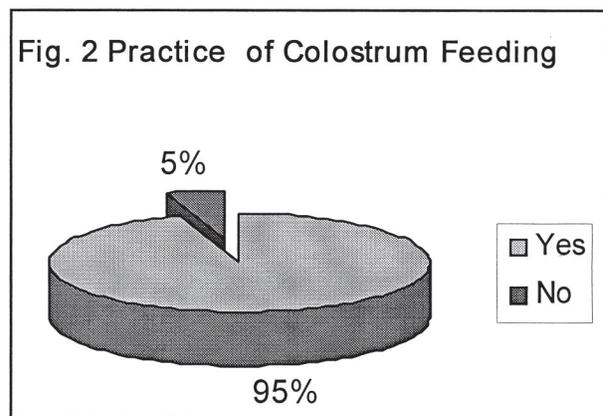
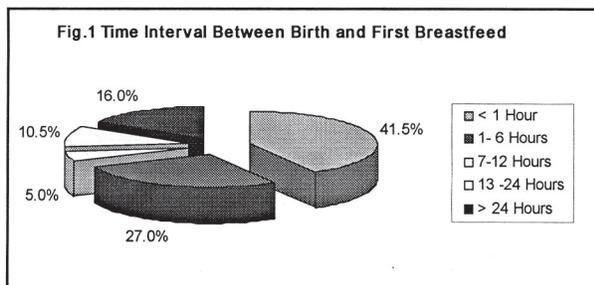
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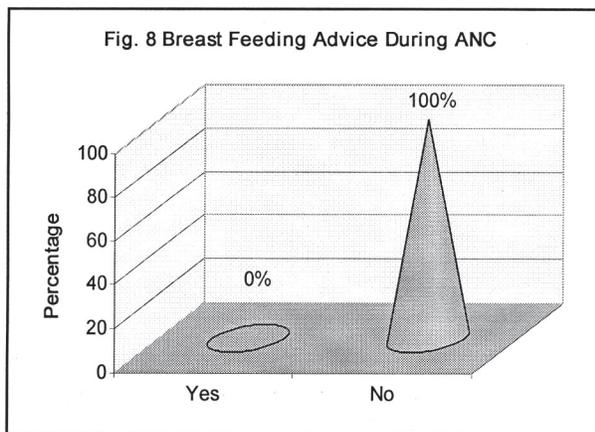
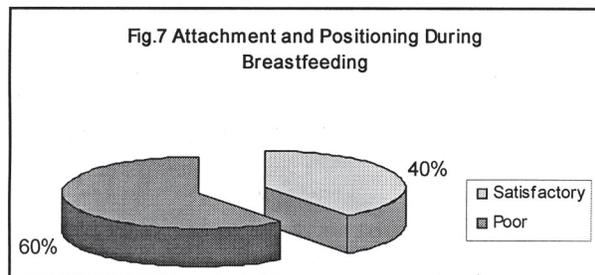
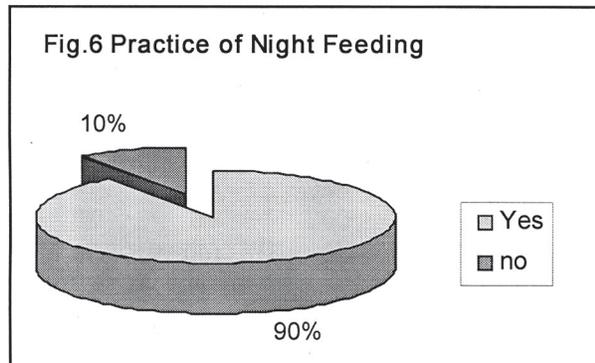
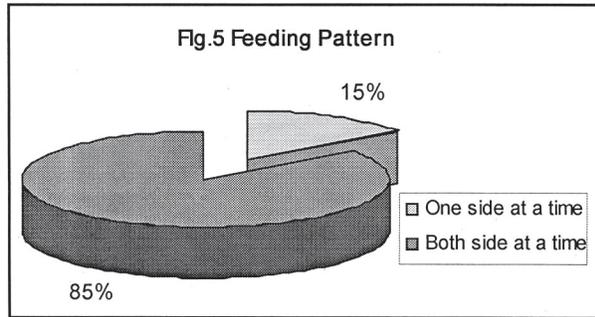
S.N.	Mother's Knowledge	Mother having Idea		Mother having no Idea	
		No.	%	No.	%
1	Have to breast feed	200	100	-	-
2	Initiation of breast feeding within ½ - 1 hours of birth	20	10	180	90
3	Meaning of prelacteal feed	20	10	180	90
4	Exclusive breast feeding	30	15	170	85
5	Importance of colostrums feeding	50	25	150	75
6	Importance of night feed	30	15	170	85
7	To feed one side at a time	10	5	190	90
8	Continue breast feeding for 2 years	150	75	50	25
9	Expressed breast milk can be used	20	10	180	90
10	Dangers of bottle feed	50	25	150	75
11	Complementary feed to start at 6 months	40	20	16	80
12	Advantages of breast feeding	60	30	140	70

All mothers knew they had to breast feed (Table 3). 10% mothers knew they had to start breast feeding within ½-1 hrs after birth, 10% had some idea on prelacteal feed, only 15% mothers could say meaning of exclusive breast feeding, 25% mothers knew the benefits of colostrum and 15% had the idea of importance of night feed. Similarly 75% mothers knew that they should continue breastfeeding till the age of 2 yrs. 10% mothers knew that expressed breast milk could be given to their babies. 25% mothers could at least say something on dangers of bottle-feeds. Only 20% mothers knew that complementary feed has to be started by age 6 months, whereas 80% mothers had no idea on complementary feed and had started either too early or late. 30% mothers knew the advantages of breastfeeding.

Breast feeding practices

It was observed that even though many mothers did not have adequate knowledge they were following the correct way of breast-feeding.





It was seen that 41.5% of the mothers breastfed their child within 1st hour of life (Fig. 1), 23.5% of the mothers practiced exclusive breastfeeding (Fig 4). Most of the mothers (95%) had given their infants colostrum (Fig.2). While 33% mothers had given prelacteal feed (Fig.3). Though 85% mothers did not

have any knowledge on importance of night feeding, the practice of night feeding was good (90%), as shown in Fig.6. Nighttime feed was defined as feeds between 10 p.m. and 6 am. 15% mother practiced feeding their babies one side at a time until whole breast was emptied (Fig 5). 85% practiced feeding bilaterally. Majority of the mothers (60.0%) did not know the appropriate way of attachment and positioning during breastfeeding (Fig. 7).

Discussion

The information for the study was collected from 200 mothers of under 1-year-old children who attended Pediatric OPD, immunization clinic and well baby clinic of BPKIHS. Mothers varied in their approach and in stocks of knowledge they had. Appropriate knowledge was not adequate.

Knowledge and practices

All mothers knew they have to breast feed (Table 3) and were practicing. NDHS 2006 reported that breastfeeding was universally practiced in the country³, whereas in Korea breast feeding rate was reported to be 16.9% in 1994.⁵ It was reported to be 56.0 % in United States in 1993. Although several studies have dealt with infant feeding, there are no data on the relationship between information and attitudes regarding breastfeeding and the actual breastfeeding pattern in this country.

Advantages of breast feeding

Knowledge about advantages of breastfeeding were linked to educational level and occupational background. Mothers mentioning at least one advantage was considered to have some knowledge and having knowledge on more than 5 advantages were considered to have good knowledge. It was observed that all mothers could mention at least one advantage of breast feeding. Working mothers were able to mention more than 5 advantages of breastfeeding. This indicates working mothers had better knowledge on breastfeeding advantages. While in another study⁸, only educational level remained statistically significant with regard to knowledge about breastfeeding advantages. In this study, mothers with more than five years of education were able to mention at least one advantage 92.6% (461/498).

Initiation of breast feeding

Only 10% mothers had idea on starting breast feeding within ½-1 hr of birth (Table 3) and in practice 41.5% mothers started breast feeding within ½-1hr of birth. Data from 2006 NDHS showed that nearly 1 in 3 children were breast-fed within ½-1hr. In this study, in 41.5% cases breastfeeding was given within 1 hour, and in 16% cases breastfeeding was given after 1 day. According to NDHS 2001 data this was noted in 60% cases.⁸

Colostrum, prelacteal feed, and exclusive breast feeding

The use of colostrum and avoidance of prelacteal foods are cornerstones in early infant nutrition and may be prerequisites for the establishment of future exclusive breastfeeding. Since 2001, the WHO recommends exclusive breastfeeding up to the age of 6 months (World Health Assembly Resolution 55.25). Colostrum was defined as the breast milk produced in the first five days after delivery. In this study though only 25% mothers had knowledge on benefits of first milk (Table 3) but in practice nearly 95% had received colostrum shown in figure 2. This was 69 percent in data given by NDHS 2006.⁹ In another study all infants had received colostrums (94%, n = 475/504).⁹ Out of 200 mothers, 33% gave pre-lacteal feed (Figure 3). Prelacteal food was defined as food/liquid given to the infant before initiating breastfeeding for the first time. According to NDHS 2006, prelacteal feed is more in terai where 2 in 3 children receive them.⁹ Only 15% mothers knew meaning of exclusive breast feeding (Table 3) but in practice 23.5% (Figure 4) were practicing exclusive breast-feeding. Mothers not able to give exclusive breastfeed were 76.5%. Only 2/3 of children less than 6 months are exclusively breast fed according to NDHS 2006.⁹ In Bolivia, the exclusive breastfeeding rate in infants under 4 months of age was found to be above 50%, with 13.6 % of infants still being exclusively breastfed at 6–9 months of age.¹¹ In a second study, only 30% of infants in Bolivia had begun receiving solid foods by 4 months of age.¹¹

Importance of night feed

Prolactin is secreted after feed to produce next feed. As secretion of prolactin is more at night, suckling at

night is encouraged. 15% of the mothers knew the importance of night feed but while coming to practice they were doing well. 90% (Figure 6) mothers were practicing night feed. This was due to baby's demand even at night.

Breast feed at one side

Breast feeding at one side until whole breast is emptied out should be the practice among mothers. This way the baby gets the hind milk, which is required for brain development. Only 5% mothers knew that they had to breast feed on one side until whole breast was emptied but 15% were practicing. They were hospital staff or relatives of medical personnel. 85% were feeding on both sides for 10 minutes each (Figure 5), thinking that feeding on one side is not enough for the baby and some thought their breast size would become unequal.

Duration of breast feeding

According to the data collected in NDHS 2006, the mean duration of breast feed in Nepal is 29 months.⁹ Median duration in this study was 27 months. In this study, mothers willing to breast feed for 2 years and more were more than double in male babies than female babies. However, mothers did agree to breast feed female babies too for at least 2 years. When asked for their opinion on the ideal duration of any breastfeeding, most mothers answered 12–24 months (85%).

Attachment and position

Improper attachment and position is one of the main causes for lactation failure. It was seen that 60% mothers did not have proper attachment and position during breastfeeding and required teaching on appropriate methods. Remaining 40% having good attachments were multipara or had child more than 5 months old.

Use of expressed breast milk

Expressed breast milk can be used, and for working mothers this is one way to continue breast feed even when they are away from their babies. Only 10% mothers knew about expressed breast milk because they were using for their neonates admitted in NICU care. More than 90% mothers said it cannot be used.

Some thought milk becomes bad once it is expressed. Others said it becomes cold and carries infection.

Breastfeeding advised during ANC

None of the mothers got any advice regarding breastfeeding during ANC. Many mothers in postnatal ward felt that they had not received enough support during prenatal period. Similar problem was seen in some other study,⁸ 91.9 % (386/420) of the women had not been informed about breastfeeding before the birth of their child. On the basis of this study, it is reasonable to advocate that in Nepal, breastfeeding information should be supplied before birth or perhaps even more importantly, on the maternity ward. Breastfeeding promotion programs on a maternity ward setting should include more than just verbal information; e.g. rooming-in, breastfeeding assistance and talks during hospitalization. The maternity ward may also provide mothers with a place to exchange ideas.

Conclusion

200 mothers from eastern part of Nepal are not representative of the whole population of the country. Hence a definite conclusion cannot be given from this study. However it can be suggested from this study that maternal knowledge and practices regarding breastfeeding is inadequate and in some areas, grossly deficient. There is a need for health education program aimed at educating mothers on: (1) Initiation of breast feeding within ½ -1 hr after birth, (2) Exclusive breast feeding till 6 months of age, (3) Importance of night feed and colostrums, (4) Continue breast feeding till 2 years, (5) Feed completely on one side at a time, (6) Use of expressed breast milk, (7) Support for proper attachment and positioning, and (8) dangers of bottle-feeding. Obstetricians are likely to have more influence on breastfeeding initiation and Pediatricians on breastfeeding durations. One of the factors hindering breastfeeding is that medical experts themselves may not possess sufficient knowledge on breastfeeding. Several factors influence success or failure of breastfeeding, including the mother's and family's commitment. Since physicians can influence this commitment, their positive attitude and knowledge is crucial in the prenatal period. Finally, to change the current trends, training programmes regarding breastfeeding should be developed for the implementation in obstetric and pediatric residents

and also nursing staffs. This study also recommends further study on knowledge and practice of mothers on breastfeeding covering large sample in community level.

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