

Research Article

Prevailing breast feeding practices of infants attending paediatric out-patient department

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ABSTRACT

Background: Objectives of current study were to know the prevailing infant feeding practices in infants and to identify the problems affecting infant and young child feeding practices and to analyze the environmental factors influence the mothers, families and caregivers in infant feeding.

Methods: The present study is a hospital based observation study. A total of 501 mothers and their infants attending new born paediatric OPD, immunization clinic of department of paediatrics for various reasons of health care were recruited for the study after their informed consent and institutional ethical clearance. Information about the first feed after birth, time of initiation of breastfeeding, duration of exclusive breast feeding, time of introduction of complementary feeding, knowledge of feeding skills, mother's concept of adequacy of breast milk were collected in the structured, pre tested proforma by personal one to one interview with the mothers. All the mothers of infants from 0 to 1 year were included. Statistical analysis: The data obtained by the interview were analyzed with regarding to mothers education level, religion and other related parameters pertaining to feeding practices. Percentages of parameters were calculated and analyzed.

Results: Majority of the mothers belong to the age group of 18 to 30 years (96.01%), prelacteal feeds were given by a good number of mothers (42.32%), 60.66% mothers were given the sugar water as the prelacteal feed and 71.56% mothers have used cup and spoon to give prelacteal feeds. 75.25% of the mothers have practiced giving colostrum, 72.26% of mothers were breastfeeding their baby for 5 to 10 minutes during each feed at an interval of 0.5 hours to 3.5 hours. Majority of mothers (34.73%) had the knowledge of starting of weaning at six months and 46.88% of mothers were giving weaning food twice daily.

Conclusion: Significant number of mothers had discarded colostrum and most of the mothers intended to give only breast milk upto four months and they did not have correct knowledge regarding exclusive breastfeeding upto six months.

Keywords: Child feeding practices, Prelacteal feed, Colostrum, Exclusive breastfeeding

INTRODUCTION

Human milk is the most appropriate of all available milk for the human infant because it is uniquely adapted to his or her needs.¹ Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants: it is also an integral part of the

reproductive process with important implications for the health of mothers.² Infant feeding and rearing practices have a major effect on short term and long-term nutritional status of infants and vary from country to country and even place to place in a given country.³ From time immemorial, nature in its wisdom has provided for the newborn, specialized nutrient by way of breast milk. The human race influenced by the all-pervading cultural

patterns, have questioned nature. Culture influences infant feeding decisions of mothers. However, very often a causal relationship between attitude and practice cannot be obtained.⁴

In our country, breastfeeding has been the traditional way of feeding the newborn and is usually prolonged, leading to a delay in weaning and compromise of nutritional status of the infant. The positive effect of breastfeeding increases with increased exclusivity of breastfeeding during first six months of life with increased total breastfeeding duration. WHO therefore recommends exclusive breastfeeding during the first six months of life followed by timely introduction of appropriate, adequate and properly fed complementary foods with continued breast feeding upto 2 years and beyond.⁵

The practice for women who could not nurse their own infants was to employ another lactating women, a wet nurse, was prevalent. A few babies were hand reared by giving animal milk. Wet nursing began to decline by middle of 19th century. Wet nurses proved to be unsatisfactory. She was to feed her own baby as well as another baby and often failed to provide an adequate quantity of milk to either. Her own baby could have died or had been abandoned, and the care given to the temporary foster baby was often very poor. Social problems developed as a number of women abandoned their own infants in order to obtain employment as wet nurses.⁶

Studies on breastfeeding practices in India done before, the WHO recommendation of exclusive breastfeeding under heading “Global strategy for infant and young child feeding in May 2002, had shown many factors like socio-cultural beliefs and practices, have affected the breastfeeding practices and these factors continues to play in the community. Hence, the study is undertaken to assess the current infant feeding practices in an urban referral hospital based population, and its influence on the effective implementation of WHO recommendation of exclusive breastfeeding.

METHODS

The present study is a hospital based observation study included 501 Mothers and their infants attending New Born outpatient department, paediatric out-patient department and immunization clinic for various reasons of health care. Mothers of infants having only upto 1 year old were included.

The information about the first feed after birth, time of initiation of breastfeeding, duration of exclusive breast feeding, time of introduction of complementary feeding, knowledge of feeding skills, mother’s concept of adequacy of breast milk were collected in the structured, pre tested proforma by personal one to one interview with the mothers.

Statistical analysis

The data obtained by the interview were analyzed with regarding to mothers education level, religion and other related parameters pertaining to feeding practices. Percentages of parameters were calculated and analyzed.

RESULTS

Majority of the mothers belong to the age group of 18 to 30 years (96.01%) with two living children (49.70%). Only 2 mothers were below the age of 18 years. Majority 249 (49.70%) had. The prelacteal feeds were given by a good number of mothers (42.32%) whereas, 55.69% of mothers were not given the prelacteal feeds. Majority of the mothers (60.66%) were given the sugar water as the prelacteal feed (Table 1). There are various reasons for giving the prelacteals. Majority of the mothers (34.12%) have opined that breast milk not secreting is the reason for giving prelacteal feeds (Table 2). Majority of mothers (71.56%) have used cup and spoon to give prelacteal feeds (Table 3). Only 34.13% mothers have initiated breastfeeding within one hour after birth of the baby. However, equal number of mothers (34.93%) has initiated breastfeeding between 1 to 4 hours after delivery (Figure 1).

Table 1: Percentage of mothers given the different type of prelacteal feeds.

Type of prelacteal feeds given	Frequency	Percent
Sugar water	128	60.66
Artificial milk	15	7.10
Honey	15	7.10
Glucose	4	1.89
Date juice	40	18.99
Others	9	4.26
Total	211	100.00

Table 2: Percentage of mothers given the different type of prelacteal feeds on the basis of various reasons.

Reasons for giving prelacteals	Frequency	Percent
Doctor’s advice	11	5.21
Advice by grand mother	44	20.88
Advice by mother	2	0.94
Advice by ANM/TBA	2	0.94
As ritual	68	32.24
Breast milk not secreting	72	34.12
Baby admitted to ICU	1	0.47
Baby not shifted	2	0.94
Good for baby health	2	0.94
Mother not able to feed	3	1.42
Mother unconscious	1	0.47
Mother in ICU	3	1.42
Total	211	100.00

Table 3: Percentage of mothers given prelacteal feeds by different modes.

Mode of prelacteal feeding	Frequency	Percent
Cup and spoon	151	71.56
Paladay	25	11.85
Fingers	35	16.58
Total	211	100.00

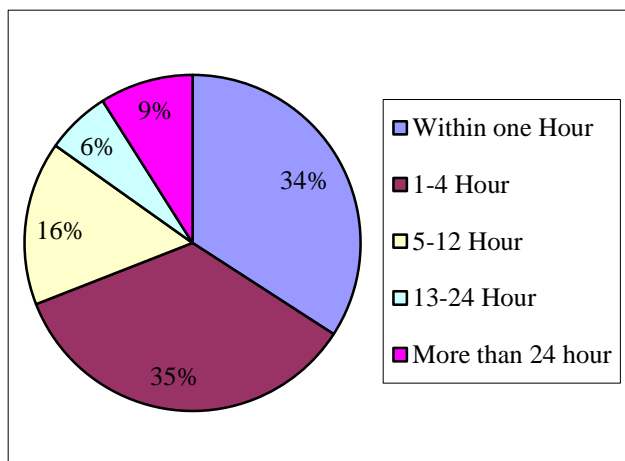


Figure 1: Percentage of mothers on the basis of initiation of breast feeding from time of birth.

Majority (75.25%) of the mothers have practiced giving colostrum. Remaining 24.75% of mothers discarded the colostrum. The various reasons for discarding colostrum are given in Table 4. Custom/tradition is 44.35% and grandparents advice is 41.13% equally influenced the discarding of colostrum. Majority of mothers (72.26%) were breastfeeding their baby for 5 to 10 minutes during each feed (Table 5). The time interval between the breastfeeding ranges from 0.5 hours to 3.5 hours. Majority of them feed at an interval of 1 to 1.5 hours (Table 6). Majority of the mothers (97.89%) were breastfeeding for more than 5 times during daytime and daytime (Table 7 and 8). Majority of mothers (36.13%) wanted to continue exclusive breastfeeding only for four months. Only 17.17% of mothers intended to exclusively breastfeed for upto six months (Table 9).

Table 4: Percentage of mothers according to the reasons for discarding the practice of giving colostrum.

Reasons for discarding colostrum	Frequency	Percent
Not suited for baby's health	18	14.52
Custom/tradition	55	44.35
Advised by mother-in-law/grand mother	51	41.13
Total	124	100.00

Table 5: Percentage of mothers according to the length of breast feeding.

Length of breast feeding (minutes)	Frequency	Percent
<5	42	8.38
5-10	362	72.26
10-15	94	18.76
15-20	3	0.60
Total	501	100.00

Table 6: Percentage of mothers on the basis of interval of breast feeding.

Interval between feeding (hours)	Frequency	Percent
0.5	2	0.40
0.5-1.0	104	20.76
1.0-1.5	285	56.09
1.5-2.0	68	13.57
2.0-2.5	21	4.19
2.5-3.0	21	4.19
3.0-3.5	4	0.80
Total	501	100.00

Table 7: Percentage of mothers on the basis of frequency of breast feeding during day time.

Frequency of breast feeding during day time	Frequency	Percent
1-2	2	0.40
3-4	10	1.71
5-6	189	37.73
6-7	94	18.76
7-8	181	36.33
8-10	4	0.88
10-12	21	4.19
Total	501	100.00

Table 8: Percentage of mothers on the basis of frequency of breast feeding during night time.

Frequency of breast feeding during night times	Frequency	Percent
1-2	4	0.80
2-3	93	18.26
3-4	188	37.52
4-5	120	23.55
5-6	72	14.37
6-8	24	4.50
8-10	5	1.00
Total	501	100.00

Table 9: Percentage of mothers on the basis of knowledge of intending to continue only breast feeding.

Intention to continue breast feeding (months)	Frequency	Percent
1	26	5.19
2	63	12.57
3	65	12.97
4	185	36.13
5	76	15.17
6	86	17.17
>6	1	0.20
12	3	0.60
Total	501	100.00

Majority of mothers (33.84%) felt that breastfeeding should be continued upto 18 months. But, most (18.06%) of mothers felt that breastfeeding should be continued beyond two years (Table 10). Weaning was started from 3 months or 6 months and above. Majority of mothers (34.73%) had the knowledge of starting of weaning at six months (Table 11). The frequency of weaning ranged between once to ten times per day but, majority of mothers (46.88%) were giving weaning food twice daily (Table 12).

Table 10: Percentage of mothers on the basis of knowledge of continued breast feeding.

Knowledge on breast feeding and weaning (months)	Frequency	Percent
1	3	0.20
9	1	0.20
12	115	22.95
18	169	33.84
24	124	24.75
27	1	0.20
30	71	14.47
36	17	3.39
Total	501	100.00

Table 11: Percentage of mothers according to the knowledge on age of starting of weaning.

Knowledge on starting of weaning	Frequency	Percent
3 months	29	5.79
4 months	105	20.95
5 months	111	22.16
6 months	174	34.73
6 months onwards	82	16.37
Total	501	100.00

Table 12: Percentage of mothers according to the frequency of weaning practice.

No. of times weaning given/day	Frequency	Percent
Once daily	49	17.94
Twice daily	128	46.88
2-3 times per day	12	4.39
3 times per day	42	15.38
3-4 times daily	5	1.83
4 times per day	5	1.83
4-5 times per day	14	5.12
5-6 times per day	12	4.39
8-10 times per day	6	2.19
Total	273	100.00

DISCUSSION

The present study is an urban referral hospital based observational study of “Infant feeding practices” of infants between 0 to 1 years of age. The beliefs and customs regarding feeding practices were studied with respect to socio demographic factors like, age, education, occupation, religion, type of family and the influence and attitude of family members towards breastfeeding were studied. Other factors like antenatal care received, the place of antenatal checkup, antenatal care providers, and type of delivery, exclusive breastfeeding, practice of giving colostrum, duration of continued breastfeeding and weaning methods, feeding during illness of both mother and baby were also studied.

In the present study the above factors were analyzed regarding their pitfalls and their influences in achieving the goal of global strategy of infant and young child feeding practices. With the purpose of knowing the change in trends of infant feeding practices, the literature available from the past two decades was reviewed. In spite of correct recommendations regarding proper infant feeding practices being available, the analysis of previous studies, reveal that the magnitude of problems of breastfeeding practices remain high till date. Only few areas like giving colostrum and positive attitude of family members towards breastfeeding were noted.

In the present study 501 mothers were recruited and vast majority of mothers were in the age group of 18 to 30 years with high school level education for 39.92% of mothers. This is comparable to BPNI study where, the authors found that 32.1% of mothers had education level of high school. Majority of the mothers (93.31%) in the study group had not received counseling on breastfeeding during antenatal check-up. This is despite the fact that doctors did ANC in majority of the mothers. Only 19.21% mothers had received suggestion.

The infant feeding practices differ in mothers who had institutional deliveries. Anand RK et al.⁷ conducted a study in maternity home in Bombay; they concluded that

there was a wide gap between the knowledge of health personnel and the practice followed in maternity home for feeding new born which is in line with the present study.

In the present study 42.32% of mothers have given prelacteal feeds in the form of sugar water. Chandrashekar et al.⁸ also observed same in their study. It is clear that practice of giving prelacteals is significant. Majority of mothers (71.56%) used cup and spoon to give prelacteal feeds. In the present study, majority of mothers (34.12%) opined that as they felt breast milk secretion has not yet started, they gave prelacteal feeds. In the present study, breastfeeding was initiated within 1 hour in 34.13% of mothers after delivery. Prabhakara GN et al.⁹ have documented that only 4.5% of mothers had done so. In a study done by BPNI,¹⁰ the authors have found that 64.7% had initiated breastfeeding within 1 hour. The high prevalence of giving colostrum is a positive observation which can be attributed to the increased awareness among mothers due to health education over years and needs further encouragement at all levels. In the present study 24.75% of mothers have discarded colostrum. Social factors have the influence in this regard as majority attributes it to be custom/tradition or as advised by grandparents.

The babies fed normally for a length of time that is appropriate for their rate of milk transfer, naturally regulating their intake. A baby who takes milk at a high rate will feed for a short time, whereas if milk transfer occurs at a slow rate, the baby will need to feed for much longer.¹¹ In the present study, majority of the babies were fed for 5 to 10 minutes. In the present study, majority of the babies were breastfed at an interval of 1 to 1.5 hours.

It is evident from the present study that majority of mothers (97.89%) practiced breast feeding during day time for more than 5 times which is comparable to the similar study in the previous year in Bangalore dist. conducted by BPNI (83.2%) and 100% of mothers offered breastfeeds to their infants during night times, which is comparable to BPNI study (98.4%). In the present study, it was observed that 59% of mothers intend to continue breastfeeding for 18-24 months which is comparable to BPNI study (70.7%).¹⁰ Shalini Chandrashekar and others⁴ have done similar study and observed 78.3% of mothers continued breastfeeding for 12 months. However data regarding continued breastfeeding for 18 to 24 months was not available.

In the present study most common type of top feeds used was cow's milk (61.29%) this is comparable with another study by Mallikarjuna et al.¹² where cow's milk was most preferred in 53.6% of babies and next common feed given was goat's milk in 24.4% of babies. In the present study, 34.73% of mothers had started weaning at the appropriate time i.e. 6 months onwards which may be due to lack of knowledge amongst the study group regarding the correct age of weaning.

CONCLUSION

Significant number of mothers had discarded colostrum, the reason given being the influence of grandparents, traditional practices and customs. Most of the mothers intended to give only breast milk upto four months and they did not have correct knowledge regarding exclusive breastfeeding upto six months. Majority of mothers believed that extra diet has a role during lactation period. Majority of mothers felt that breastfeeding should be continued for 18 months of age and most of the mothers preferred to continue breastfeeding during maternal and baby's illness.

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Ethical approval: The study was approved by the institutional ethics committee

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