



# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Socio-Cultural Factors Influencing Infant Feeding Practices in Rural Tumkur

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### ABSTRACT

To study the socio demographic and cultural factors influencing infant feeding practices in rural area. This was a cross-sectional study on infant feeding practices in rural area (field practice area of Sri Siddhartha medical college, Tumkur). A pretested questionnaire was used in the study and 110 mothers were interviewed about breast feeding and other infant feeding practices. The difference in administering prelacteal feeds between the mothers receiving and not receiving education on infant feeding was statistically significant.  $\chi^2=3.7$   $p<0.05$ . The difference in administering prelacteal feeds between Muslim mothers and Hindu mothers was statistically significant.  $\chi^2=9.21$   $p<0.05$ . The difference between institutional and home deliveries regarding administration of colostrum by mothers was also statistically significant.  $\chi^2=6.25$   $p<0.05$ . Morbidity pattern was more in infants who were on top feeds compared to infants who were on exclusive breast feeding and mixed feeding.  $\chi^2=7.53$   $p<0.05$ . Education about infant feeding to pregnant and lactating mothers plays a vital role in preventing morbidity and mortality in infants.

**Keywords:** prelacteal feeds, colostrum, human milk, weaning.

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## INTRODUCTION

Human milk is the most appropriate of all milk for the human infant because it is uniquely adapted to his or her needs. Infant feeding and rearing practices have a major effect on short term and long term nutritional status of infants and vary from place to place. Socioeconomic status, education and religion influence these practices directly or indirectly.

In our country, breast feeding has been the traditional way of feeding the newborn and is usually prolonged, leading to a delay in weaning and for compromise of nutritional status of the infant. Encouraging and supporting breast feeding with exclusive breast feeding for the first six months of life, promotion and support of appropriate weaning practices and health education to the mothers will help to go a long way in reducing incidence of malnutrition in our country. This in turn will reduce infant mortality rate. Hence this study was carried out.

## METHODS

We included 110 children from 0 to 1 year from September 2010 to September 2011 in the rural field practice area (Nagavalli) of Sri Siddhartha Medical College, Tumkur. Only full term babies delivered either vaginally or through caesarian section were included. Preterm babies, babies with congenital anomalies and cerebral palsy were excluded from the study. A pretested questionnaire was used. Data of lactating mothers was collected from the nearby PHC and anganwadi centers. House to house visit was also made to identify infants. Mothers were interviewed about breast feeding, supplementary feeding, vitamin and mineral supplementation etc.

The data on breast feeding practices including frequency, length of feeding, duration of feeding and the age of introduction of weaning foods were collected.

## RESULTS

Majority of the mothers were following small family norm(table-3) having upto two children (46.36%) and most had undergone regular antenatal checkups(89%), had normal delivery in the institutions (table-4). 38 mothers (34.54%) initiated breast feeding within one hour(table-5).Despite the advice by healthcare personnel not to give prelacteal feeds, 47 mothers (42.7%) had given(table-6). Honey was the most commonly used one (table-7). The common reason for giving prelacteal feeds was the perception that there was no secretion of breast milk. 29 mothers discarded colostrum due to various reasons (table-10). Among the breastfed babies, 98.18% had received direct feeding as on demand and the remaining expressed breast milk. 96.3% were fed more than five times per day and 17.2 % received breast feeding more than five times during night time. Majority of them (71.81%) were fed for 5-10 minutes. The interval between 2 feeds was about one to one and half hours in 67 mothers (60.9%). Positioning of the mother for feeding babies was either sitting or lying down but all of them were comfortable in feeding.

**Table 1: Age distribution of mothers (n=110)**

Age of mother (yrs)	frequency	Percent
16	2	1.81
17	3	2.72
18	7	6.36
19	15	13.63
20	18	16.36
21	17	15.45
22	23	20.9
23	7	6.36
24	9	8.18
25	2	1.81
26	3	2.72
27	1	0.9
28	1	0.9
30	2	1.81
Total	110	100

**Table 2: Mothers according to religion (n=110)**

Religion	frequency	Percent
Hindu	72	79.2
Muslim	31	34.1
Christian	7	7.7
Total	110	100

**Table 3: Mothers according to number of living children (n=110)**

No.of children	frequency	Percent
1	39	35.45
2	51	46.36
3	13	11.81
4	5	4.54
5	2	1.81
Total	110	100

**Table 4: Place of birth of child (n=110)**

Place of birth	frequency	Percent
Home	23	20.9
PHC	58	52.72
Private hospital	8	7.27
Dist.hospital	21	19.09
Total	110	100

**Table 5: Mothers according to initiation of breast feeds (n=110)**

Breast feeding from birth time	frequency	Percent
Within hour	38	34.54
1-4 hour	55	50
5-12 hour	9	8.18
13-24 hour	5	4.54
>24 hour	3	2.72
Total	110	100

**Table 6: Distribution of mothers according to education on breast feeding and administration of prelacteal feeding**

Education on Breast feeding	Prelacteal feeds given	Percent	prelacteal feeds Not given	percent	Total
Yes	4	8.5	14	22.29	18
No	43	91.5	49	77.79	92
Total	47	100	63	100	110

**Table 7: Distribution of mothers according to religion and prelacteal feeds**

Prelacteal feeds	Hindu/Percent	Muslim/Percent	Christian/percent	Total
Yes	28/38.88	17/54.83	2/28.57	47
No	44/61.11	14/45.16	5/71.42	63
Total	72/100	31/100	7/100	110

**Table 8: Type of pre lacteal feeds given (n=47)**

Type of pre lacteal feeds given	Frequency	Percent
Sugar water	11	23.4
Artificial milk	2	4.25
Honey	17	36.17
Glucose	3	6.38
Date juice	11	23.4
Others	3	6.38
Total	47	100

**Table 9: Distribution of mothers according to place of delivery and feeding of colostrum**

Colostrum	Home delivery	Percent	Insitutional Delivery	Percent	Total
Given	13	56.52	68	78.16	81
Not given	10	43.47	19	21.83	29
Total	23	100	87	100	110

**Table 10: Reasons for discarding colostrum, (n=29)**

Reasons for discarding colostrum	Frequency	Percent
Not suited for baby's health	5	17.85
Custom/tradition	7	25
Advised by mother-in-law/grandmother	17	60.71
Total	29	100

**Table 11: Reasons for not breast feeding (n=21)**

Reasons for not breast feeding	Frequency	Percent
Insufficient milk	12	57.14
Breast problem	3	14.28
On advise by grand mother	4	19.04
Others (relatives, neighbors)	2	9.52
Total	21	100

**Table 12: Mothers according to perception of insufficient breast milk (n=12)**

Insufficient breast milk	Frequency	Percent
Baby not gaining weight	3	25
Excessive cry	7	58.3
Others	2	16.66
Total	12	100

**Table 13: Type of top feeds (n=21)**

Type of feed	Frequency	Percent
Cow's milk	9	42.85
Goat's milk	2	9.52
Buffalo's milk	7	33.33
Formula feeds	3	14.28
Total	21	100

**Table 14: Distribution of infants according to feeding and morbidity ( diarrhea and pneumonia ).**

Morbidity	Infant feeding			
	Breast feeding/ %	Mixed feeding/ %	Top feeds/ %	Total
Yes	1/ 2.63	4/19.04	12/23.52	17
No	37/97.36	17/80.95	39/76.47	93
Total	38/100	21/100	51/100	110

**Table 15: Age of initiation of weaning (n=61)**

Weaning practice	Frequency	Percent
<4 months	14	22.95
4-6 months	28	45.9
6 months	10	16.39
>6 months	9	14.75
Total	61	100

**Table 16: Distribution of infants according to type of weaning.**

Type of weaning	Frequency	Percent
Biscuits	5	8.19
Cerelac	6	9.83
Cow's milk	3	4.91
Farex	2	3.27
Goat milk	1	1.63
Ragi porridge	35	57.37
Rice dhal	9	14.75
Total	61	100

## DISCUSSION

Infant feeding and rearing practices have a major effect on short term and long term nutritional status of infants. Socioeconomic status, education and religion influence these practices directly or indirectly. We conducted a cross sectional study in Nagavalli village, the rural field practice area of Sri Siddhartha medical college, Tumkur to know the infant feeding practices. Although many mothers had antenatal checkups, majority of them were not given proper education regarding infant feeding. There was a significant association between place of delivery and administration of colostrum (table-9). There was also a significant relation between the educational status of mothers and initiation of breastfeeding. Many mothers had discarded colostrum and most of them were not aware of exclusive breast feeding and intended to feed their babies with only breast milk up to 4 months. Majority of the mothers believed that extra diet during lactation period helps in milk secretion. Less number of mothers had knowledge regarding initiation of weaning foods (table-15) and most preferred weaning food was Ragi porridge (table-16). Majority of the mothers perceived that infant's weight gain was adequate with this. Most of the mothers preferred to continue breast feeding during maternal and baby's illness. Majority of the family members had a positive attitude towards breast feeding. The education regarding breast feeding given to mothers has got significant positive impact on overall infant feeding practices.





## CONCLUSION

Various sociocultural factors influence infant feeding practices directly or indirectly. In this study, although majority of the mothers had regular antenatal checkups by healthcare personnel, only a few of them were educated about infant feeding. Many mothers were lacking knowledge about the importance of colostrum, exclusive breast feeding till 6 months of age, right age of initiation of supplementary feeds etc. Hence education regarding infant feeding to pregnant and lactating mothers plays a vital role in preventing infant morbidity and mortality.

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