

Research Article

Knowledge and practice on breastfeeding and infant feeding practices in pregnant women, at Sarjapura, Bangalore

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ABSTRACT

Background: Breastfeeding is the unique source of nutrition that plays an important role in the growth, development and survival of infants. Breast feeding is important, particularly in developing countries because of its relationship with child health and birth spacing. The frequency of breast feeding also plays a role in lactational amenorrhea. Though breast feeding is universal in India, the rate of initiation, exclusive breastfeeding and timing of complementary feeds are far from desirable.

Methods: A cross sectional study was carried out in Sarjapura, Bangalore from September 2010 to May 2011. Using stratified random sampling method a sample of 118 pregnant mothers who were in 3rd trimester included in this study. Their knowledge and practice with regard to prelacteal feeds, initiation of breastfeeding, feeding colostrum, exclusive breastfeeding and age of introduction of complementary feeds were assessed by interviewing using pre-tested semi structured questionnaire.

Results: The prevalence of mothers giving prelacteal feeds, initiation of breastfeeding within half an hour after delivery, exclusive breastfeeding at 6 months and age of introduction of complementary feeds after 6 months were 97.4%, 28%, 25.4% and 25.4% respectively.

Conclusions: There is a need for educational interventional to promote the breastfeeding and infant feeding practices in the community.

Keywords: ASHA, Breast feeding, Complementary feeds, Colostrum, Infant feeding practices, Prelacteal feeds

INTRODUCTION

Breastfeeding is the unique source of nutrition that plays an important role in the growth, development and survival of infants. The benefits of breastfeeding especially exclusive breastfeeding are well established, particularly in poorer environments where the early introduction of other milk is of particular concern because of the risk of contamination and over dilution of milk leading to increased risks of morbidity and under nutrition.¹

Breastfeeding is promoted internationally as the preferred method of feeding infants up to 6 months and continued up to 2 years with the addition of home cooked food.¹

Exclusive breastfeeding is recommended worldwide as the optimal feeding for first 6 months of life and semisolid foods are recommended to be introduced after 6 months of age while breastfeeding is continued to meet the increased physiological requirements of the growing infant.²

Breast feeding is important, particularly in developing countries because of its relationship with child health and birth spacing. The frequency of breast feeding also plays a role in lactational amenorrhoea.³ Though breast feeding is universal in India, the rate of initiation, exclusive breastfeeding and timing of complementary feeds are far from desirable.⁴

Studies from different parts of the country have brought out the practices of early introduction of top feeds in the form of diluted animal milk or giving water to breastfed babies and late introduction of semisolids to be widely prevalent.²

Feeding practices during childhood are of critical importance to growth and development of children, especially during the preschool years. These practices are influenced to a great extent by the socio-economic status, education, religion, knowledge, attitude and beliefs of mother about childcare. These practices adversely affect the health and nutritional status of infants and young children resulting in varying degrees of malnutrition that affects almost half of the nation's children.⁵⁻⁷

The nutritional and health status of the infants mainly depends on the feeding practices of the community. It is seen that the child rearing practices differ in different states, districts and in the people living in different regions in the same states. Superiority of breastfeeding over bottle feeding has been established almost as an axiomatic feature. During the last decade, this has received a renewed thrust and emphasis for being used as an effective tool in improving the survival, morbidity and the health state of children.⁸

In spite of many efforts from the government, the prevalence of exclusive breastfeeding in our country remains below the desirable level, 46.3% and children who received complementary feed and breast milk after 6 months was 55.8% (National Family Health Survey-3).

The present study was taken up to assess the knowledge and practice about breast feeding and infant feeding practices in pregnant women in the rural field practice area of Vydehi Institute of Medical Sciences and Research Centre.

METHODS

A cross sectional study was conducted in Sarjapura Primary Health Centre area, Bangalore from September 2010-May 2011. Assuming the prevalence rate of exclusive breast feeding of 46%, at 95% confidence level and 20% allowable error, the sample size came to 118. Using stratified random sampling method a sample of 118 pregnant mothers who were in 3rd trimester residing permanently in the area were the target group. A semi-structured questionnaire was used to collect the data for a period of nine months from September 2010 to May 2011.

Informed consent was taken from mothers. General information as well as their knowledge and practice with regard to prelacteal feeds, initiation of breastfeeding, feeding colostrum, exclusive breastfeeding and age of introduction of complementary feeds were obtained.

The data was entered into an excel sheet and it was analysed using SPSS 16 version. The data was analysed for percentage.

RESULTS

Table 1: Assessment of knowledge on exclusive breastfeeding.

Questions	Knowledge present (percentage)	Knowledge absent (percentage)
Have you heard of exclusive breast feeding?	30.5	69.5
How long should baby be breastfed?	31.4	68.6
Complementary feeds should be started at what age?	32.2	67.8

Table 2: Assessment of knowledge on breastfeeding and infant feeding practices in mothers.

Question		
Did anyone teach you of breastfeeding	Number of mothers	Percentage
Elderly person	46	39
ASHA worker	20	17
Anganwadi worker	52	44
Anyone supported breastfeeding	No	Percentage
Elderly person	36	30.5
Asha worker	48	40.7
Anganwadi worker	34	28.8
Did anyone tell you about prelacteal feeds	Number of mothers	Percentage
Elderly people	29	24.6
Others	1	0.8
No one	88	74.6
Are there any benefits from prelacteal feeds	Number of mothers	Percentage
Yes	10	8.47
No	89	75.4
Don't know	19	16.1

Majority of mothers (50%) of them were in 16-20 age groups, with mean age of 21.69 years and standard deviation of 2.42. Majority of mothers were in within class 2 to class 4 socio-economic status with none in class 1 and class 5.

Majority of mothers were literate, 94 (79.66%) with most of them studied till high school (24.6%) followed by primary school (16.1%) and PUC (15.35) compared to illiterate with 20.3%.

Table 3: Assessment of practice on breastfeeding and infant feeding practices in mothers.

Practice		
Initiation of breastfeeding	Number of mothers who practised	Percentage
< ½ an hour	33	28
½-6 hours	69	58.5
6-12 hours	8	6.8
12-24 hours	3	2.5
>24 hours	5	4.2
Prelacteal feeds given	Number of mothers who practised	Percentage
Yes	30	25.42
No	88	74.57
What prelacteals given?	Number of mothers who practised	Percentage
Sugar water	19	16.1
Jaggery water	2	1.7
Honey	3	2.5
Date juice	1	0.8
Others	5	4.2
Colostrum given	Number of mothers who practised	Percentage
Yes	112	94.9
No	6	5.1
Duration of exclusive breastfeeding	Number of mothers who practised	Percentage
6 months	36	30.5
<6 months	52	44.1
>6 months	30	25.4
Duration of breastfeeding	Number of mothers who practised	Percentage
<1 year	25	21.2
1-2 years	63	53.4
>2 years	30	25.4
Type of breastfeeding	Number of mothers who practised	Percentage
Timed	0	00
Demand	118	100
No. of times breastfed in a day	Number of mothers who practised	Percentage
4-8 times	2	1.7
8-10 times	92	78
>10 times	24	20.3
At what age complementary feeds started?	Number of mothers who practised	Percentage
6 months	36	30.5
< 6 months	52	44.1
> 6months	30	25.4
Type of food given	Number of mothers who practised	Percentage
Ragi sari	70	59.32
Cerelac	43	36.44
fruit juice	44	37.28
rice dhal	65	55.08
animal's milk	37	31.35
Rice with vegetables	36	30.50
No of times given in a day	Number of mothers who practised	Percentage
3 times /day	26	22.03
< 3 times/day	18	15.25
> 3 times/day	74	62.71

Most of the mothers belong to Hindu religion constituting 74.6% and the remaining belonged to Muslim religion (25.4%).

Nuclear family was the most common constituting 60.2%, followed by joint family with 38.1% and extended family with 1.6%. Only 10 mothers were working and they were working in house as tailors and only 2 mothers out of them were working as teachers in school. Female babies (50.8%) were more than male babies (49.2%).

Assessment of knowledge of mothers shows that, about Exclusive breastfeeding, only 36 (30.5%) mothers knew and remaining 82 (69.5%) didn't know about Exclusive breastfeeding and how long to be exclusively breastfed (6 months). On duration of breastfeeding 37 (31.4%) mothers answered that baby should be breastfed for at least 2 years. About complementary feed practice only 38(32.2%) mothers felt it should be started around 6 months. Among the remaining 80 (67.8%) mothers, 53 (44.9%) mothers felt it should be started after 6 months, remaining 27 (22.8%) felt less than 6 months is ideal time.

About prelacteal feeds, 10 mothers felt that it helps in removing waste product from baby's body and one mother felt that prelacteal feed, bark from certain species of tree helps in avoiding convulsions. 19 mothers said prelacteal feeds should be given but they didn't know the benefits. Prelacteal feeds was told most by elderly people present in the home 24.6% Breastfeeding was taught by Anganwadi workers the most (44%) and elderly persons in their house (39%) and from ASHA worker (17%). It was supported mostly from ASHA worker (40.7%) and from anganwadi worker and elderly people almost equally (35%). No one had hindered mothers from breastfeeding.

DISCUSSION

According to NFHS-3 data, 24.5% of babies are breast fed within one hour, in this study⁹, 33(28%) mothers initiated breastfeeding in less than half an hour and 69 (58.5%) mothers within half an hour to 6 hours with most of them having underwent caesarean section, 8 (6.8%) mothers in 6 hours to 12 hours, 3 (2.5%) in 12 hours to 24 hours and 5 (4.2%) mothers more than 24 hours as the baby were kept in ICU due to medical problems.

Majority of mothers have given colostrum 112 (94.9%).

On exclusive breastfeeding, only 36 (30.5%) mothers have breastfed till 6 months and 52 (44.1%) of mothers for less than 6 months, which is almost near to National average (46.3%), and remaining 30 (25.4%) for more than 6 months. Depending on duration of breastfeeding majority of mothers 63 (53.4%) have breastfed for 1-2 years, 25 (21.2%) mothers have breastfed for less than 1 year, and 30 (25.4%) for more than 2 years.

Almost all mothers have practiced demand type of breastfeeding. 92 (78%) mothers breastfed for 8-10 times/day with 24 (20.3%) of them for more than 10 times/day, and only 2 (1.7%) mothers for less than 8 times/day.

In this study, 30 (25.42%) mothers have given prelacteal feeds; Chatterjee Saurav et al study showed that 54.5% of newborns received prelacteal feed.¹⁰

Among prelacteal feeds sugar water was most common 16.1%, followed by honey and date juice (4.2%), only honey (2.5%) and jaggery water (1.7%) and they were fed by spoon in majority. In Devang Ravalet al study showed that 50% Infants received "Jaggerywater" as prelacteal, while other received honey (25%) and "cow or goat milk" (5.8%).¹¹

52 (44.1%) of mothers started weaning in less than 6 months, 30 (25.4%) of mothers in more than 6 months and only 36 (30.5%) of mothers around 6 months. Among the type of food given after 6 month period were ragi sari was the most common (59.32%), cerelac (36.44%), fruit juices (37.28%), Rice dhal (55.08%) most of the mothers were giving the food in combination. Vegetables were also added to rice by most of the mothers (30.5%), cow's milk (31.3%) was the supplementary milk given apart from breast milk. Majority of mothers (74) were giving more than 3 times per day with only few, 18 mothers for less than 3 times per day.

CONCLUSION

The present study revealed that the practice of prelacteal feeds was associated with lower socio economic status and educational level of the participants and this was statistically significant ($p < 0.01$). This shows that education and economic status plays an important role in exclusive breast feeding.

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REFERENCES

1. Giashuddin MS, Kabir M Breastfeeding duration in Bangladesh and factors associated with it. Ind J Com Med. 2003;28(1):34-8.
2. Taneja DK, Saha R, Dabas P, Gautam VP, Tripathy Y, Mehra M. A study of Infant Feeding Practices and the underlying factors in a rural area of Delhi. Ind J Com Med. 2003;28(3):107-11.
3. Khan M.E: Breast feeding and weaning practices in India. Asia Paci Pop J Mar. 1990;5(1):71-88.
4. Patel A, Badhoniya N, Dibley M. Breastfeeding and infant feeding practices in India- A review of Demographic and Health Surveys and National Family Health Surveys. Solution Exchange for MCH Community Newsletter, Breastfeeding Month Special; 2008.
5. Singhanian RU, Kabra SK, Bansal A. Infant feeding practices in educated mothers from upper socio-economic status. Indian Pediatrics. 1990;27:591-93.
6. Kalra A, Kalra K, Dayal RS. Breast feeding practices in different residential, economic and educational groups. Indian Pediatrics. 1982;19(5):419-26.
7. Ghosh S, Gidwani S, Mittal SK, Verma RK. Socio-cultural factors affecting breastfeeding and other infant feeding practices in an urban community. Indian pediatrics. 1976;13(2):827-32.
8. Chandrashekar T, Bhaskar S, Sugunamani BK. Breast feeding pattern in Neonates, Indian Pediatrics. 1994;31:1079-82.
9. National Family Health Survey (NFHS – 3). Mumbai: International Institute for Population Sciences; 2005-06.
10. Saurav C, Sandhita S. A study on KP of mothers regarding infant feeding and nutritional status of Under 5 children attending immunization clinic of Medical college, The Internet Journal Nutrition and Wellness. 2008;5(1).
11. Raval D, Jankar DV, Singh MP. A study of breast feeding practices among infants living in slums of Bhavnagar city, Gujarat, India. Healthline Journal. 2011;2(2):78-83.

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