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Original Research Article

A community based study of breast feeding and weaning practices among mothers in urban field practice area of SRTR, GMC, Ambajogai

Mohammed Rehan Shaikh*, A. S. Nagaonkar

Department of Community Medicine, Govt. Rural Medical College, Ambajogai, Maharashtra, India

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***Correspondence:**
Dr. Mohammed Rehan Shaikh,
E-mail: rehanrafe8@gmail.com

ABSTRACT

Background: Mother's milk is the best gift nature has provided. Practicing exclusive breastfeeding for 6 months is the simplest, healthiest and least expensive feeding method that fulfills the infant's needs for nutrition and growth. Breast feeding is a common practice in India but factors influences breast feeding practice such as gender inequity, lack of knowledge, social pressure, pre-lacteal feed, illness among the lactating mother etc. Study of socio demographic factors and pattern of breast feeding and weaning practices in urban field practice area.
Methods: A cross-section study was conduct in Urban Health Center of Govt. medical college and hospital of Ambajogai, Maharashtra. Mothers who are having a child between 0-24 months of age of both sexes were included in this study and interviewed.
Results: Out of 193 women's, most of the mothers were aged less than 25 years (78.04%) and were Hindus (73.9%). Most were illiterate (68.30) and belonged to the class V (97.5%), majority were housewives (99.1%) and multiparous (68.2%). Most had initiated breastfeeding (78.8%) within 24 hours of delivery. About 15.4% of the infants did not receive colostrums and 22.8% of the infants were not exclusively breastfed. Ghutti (water mixed with honey and herbs), boiled water, tea, and animal milk were commonly used pre-lacteal feeds.
Conclusions: Despite higher rates of early initiation of breastfeeding and exclusive breastfeeding, awareness of the benefits of exclusive breastfeeding was low. Indicates need to promote awareness of the correct method of infant feeding and care of the newborn.

Keywords: Breast feeding, Duration, Initiation, Pre-lacteal feed, Weaning practices

INTRODUCTION

Mother's milk is the best gift nature has provided. It is complete nourishment for babies. It provides all the energy and nutrients that the infants needs for the first year of life.[1] Breast milk is the natural first food for babies, it provides all the energy and nutrients that the infant needs for the first months of life it is also important for sensory and cognitive development and also protects the infant against infectious and chronic diseases. Exclusive breastfeeding for 6 months is the optimal way of feeding infants. Breastfeeding remains the simplest, healthiest and least expensive feeding method that fulfils the infants' needs. It has been observed that infants aged 0– 5 months who are not breastfed have seven-fold and five-fold increased risks of death from diarrhoea and pneumonia.[2] The United Nations Children's Fund (UNICEF) has estimated that exclusive breastfeeding in the first six months of life can reduce under-five mortality rates in developing countries by13%.[3]

Breast-feeding has declined worldwide in recent years, as a result of urbanization, marketing of infant milk formulae and maternal employment outside the home. Studies in India have also shown a decline in breast-feeding trends, especially in urban areas.[4] The breast feeding practices vary among the different regions and communities in India. Frequent monitoring of changing trends in these practices is therefore necessary in societies in highly dynamic states of development.[5]

Exclusive breastfeeding, which giving breast milk only and no other liquids, except drops or syrups with vitamins, mineral supplements or medicines, is superior to non-exclusive breastfeeding with a protective effect against both morbidity and mortality.[6]

The Federal Ministry of Health and Social Services in conjunction with UNICEF and WHO launched the Baby Friendly Hospital Initiative (BFHI) to protect promote and support breast feeding. Its main objectives are promotion of early initiation of breast feeding (within 30minutes of delivery), EBF for the first six months of life, breastfeeding on demand and rooming in practices and continuing breastfeeding with complementary feeds into the second year of life.[7] According to the WHO, exclusive breastfeeding for the first 6 months of life and continued breastfeeding with the addition of complementary feeding for up to 2 years of age and beyond is sufficient form maintaining a child's health status.[8]

Aim

1. Study to find out the pattern of breast feeding and weaning practices in urban field practice area.
2. Study of socio- demographic factor associated with breast feeding and weaning practices.

METHODS

The permission and clearance was taken from institutional ethics committee to perform the study. This cross-sectional study was conducted at a Urban health training center, which is attached to a Rural govt. medical college, Ambajogai, Maharashtra. Study Period from June 2015 to October 2015 for the period of 5 months. The Chanai Urban health training center catchment area has a population of 5586. Mothers with infants aged 0 to 24 months were included in the study. Verbal consent was obtained. Those who were not willing to participate were excluded.

All the mothers agreed to participate in the study. A predesigned and pre tested structured questionnaire was used to interview 193 mothers of children between age group 0-2 years residing in field practice area. The questions put forth were in the regional language like Marathi.

Data collection procedure

The interviews of mothers were taken after written informed consent and using a pre-tested semi-structured questionnaire. The socio-demographic features such as age, religion, education, occupation and monthly family income were collected.

In the present study, data obtained from mothers was the place of delivery (in home or hospital), pre-lacteal feeding given, time of BF initiation after delivery (within 1 hour or after 1 hour), colostrum's given, exclusive or non-exclusive BF, breast milk substitute given, prior awareness of BF practice and total duration of BF. The data regarding weaning practices was age of initiation of weaning, immediately stopped BF following initiation of weaning, type of weaning food as liquid or solid, used milk substitutes and weaning diarrhoea.

Statistical analysis

Data was processed by software package Epi Info™ 7 (7.1.2) from Center for Disease Control and Prevention, USA and excel sheet. The information was analyzed by appropriate statistical tests. Results were expressed in percentages, odds ratios, 95% confidence interval of odds ratio and chi square tests ($\chi 2$). The p value less than 0.05 were taken as statistically significant.

RESULTS

Socio demographic profile

In our study, the majority of the mothers were less than 25 years old. About 132 (68.39%) of the mothers were illiterate and belonged to a low to medium socio-economic class 188 (97.4%) and Hindu by religion 143 (74.09).

A majority of the mothers multigravidae 132 (68%) and the age at marriage was between 18 and 20 years old (78%). The majority of the mothers were illiterate, housewives 188 (97.4%) and mothers who were employed were 5 (2.59%)

Place and type of delivery

Majority of mothers delivered in government hospital 171 (88.68%) followed by delivery at home 22 (11.39%). Majority had full term normal delivery 167 (86.52%) and 26 (13.47) mothers delivered by caesarean section (Table 1).

Duration of breastfeeding

Only 52 (26.94%) child of the mothers did the exclusive breastfeeding until 6 months and started weaning after 5 months. A total of 24 (12.43%) of the mothers in our study prematurely started weaning the child. A majority of the mothers started weaning at the age of 6 months.

Only 12 (6.2%) mothers continued to breastfeed the baby even at 9 months. A total of 151 (78.23%) of the mothers followed on-demand feeding practices and rooming in. Majority semi-solid food (dhal khichadi ghee khichadi) followed used by Cow's milk 73 (37.82%) (Table 2).

Table 1: Socio-demographic profile of mothers.

Characteristics	No. of subject (N=193)	Percentage (%)
1. Age		
18-21	46	23.83
22-25	103	53.36
26-29	41	21.24
30 & ab0ve	3	1.55
2. Socio-economic status- B.J Prasad classification(2014)		
Class I- >5571	0	0
Class II- 5570-2786	0	0
Class III-2785-1761	0	0
Class IV- 1760-836	5	2.59
Class V- <835	188	97.4
3. Religion		
Hindu	143	74.09
Buddhist	44	22.79
Muslim	6	3.1
4. Caste		
General	149	77.20
OBC	0	0
ST/SC	44	22.79
5. Education of women		
Illiterate	132	68.39
primary	48	24.87
Secondary	8	4.14
higher secondary	5	2.59
graduate	0	0
Post-graduate		
6. Occupation of women		
House wife	188	97.4
Service	5	2.59
Cultivaters/farmers	0	0
7. Parity		
Primi	61	32
Multiparity	132	68%
8. Type of Family		
Nuclear	75	38.86
Joint	118	61.13
9. Birth order		
<2	137	70.98
≥2	56	29.1
10. Gender of child		
Male	101	51.81
Female	92	48.18
11. place of delivery		
Govt. hospital	171	88.68
Private hospital	0	0
Home	22	11.39
12. Type of delivery		
FTND	167	86.52
LSCS	26	13.47

Table 2: Breast feeding practices among mothers.

Breast feeding practices	Subject (N=193)	Percentage (%)
A. Time of initiation of breast feeding		
(1) <1/2 HR	138	71.50
(2) 1/2 to 4 HR	33	17.09
(3) 4 -6 HR	22	11.30
(4) 6-12 HR	0	
(5) 12-24 HR	0	
(6) 24-48HR	0	
(7) 48-72HR	0	
B. Colostrum given	(n=193)	
Yes	163	84.45
No	30	15.54
C. Reason for not given colostrum	(n=30)	
1. Elder's advice	11	36.66
2. Child could not suck	5	16.66
3. Not good for child	14	46.66
D. Exclusively breastfeed	(n=193)	
Yes	141	73.05
No	52	26.94
E. Reason for not exclusively breastfeeding	(n=52)	
1. Inadequate milk secretion	28	53.84
2. Mother health/delivery complication	16	30.76
3. Child health	5	9.61
4. Due to working condition	3	5.76
F. Pre-lacteal feed	(n=52)	
1. Animals milk	20	38.46
2. Ghutti	12	23.07
3. Honey	15	48.07
4. Water/tea	5	9.6

Initiation of breast feeding

Most of the mothers initiated breastfeeding within ½ hour 138 (71.50%), 33 (17.09%) in between ½ to 4 hours and the other 22 (11.03%) were not able to initiate due to separation from mother.

A total of 14 (7.25% of the mothers initiated breastfeeding within 30 minutes with home delivery and 26 (13.47) with Caesarean section. There was a delay of 2 to 6 hours in feeding. A total of 27% of the mothers in our study didn't breastfeed even after 24 hours after the delivery. They were given pre lacteal feeds and discarded the colostrum. A total of 16 (8.21%) of the babies were fed with Animal milk alone for more than 48 hours. Honey 13 (6.7%) and Ghutti 12 (6.2%) were also commonly used pre lacteal feeds (Table 2).

Supplementary feeding

Figure 1 shows age of initiation of supplementary feed. About 37 infants received Supplementary feed below 6 month of age, 128 infant in between 6 to 9 month, 22 infants in between 9 to 12 month and only 6 infants received supplementary feed after 12 month of age.

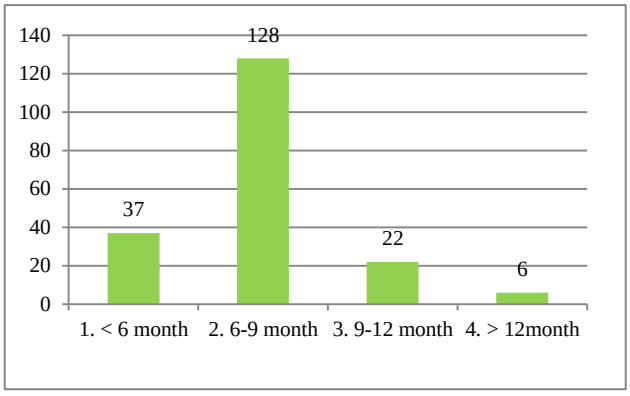

Figure 1: Age of initiation of supplementary feed.

Figure 2 shows type of complementary feed. Out of 193 subjects 105 infants received semisolid food, 73 milk, 58 dhal- khichadi, ghee khichadi and only 15 infants received infant formula.

Table 3 shows 103 mothers were aged between 22- 25 years, 132 were illiterate, 170 mothers belongs to low i.e. class V socio- economic class. Majority of subjects weaning was done at 6 month of age.

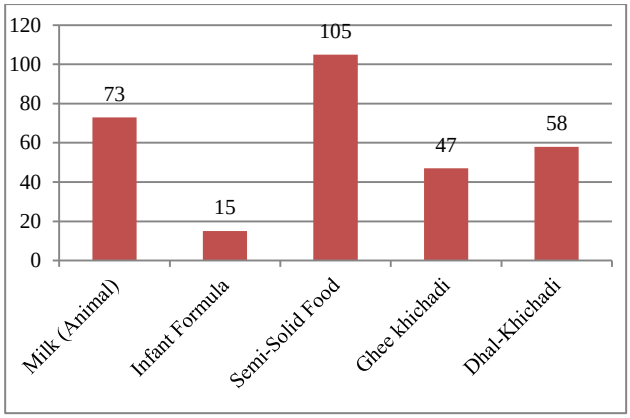

Figure 2: Type of complimentary feed.

Table 3: Weaning practices.

Parameters	No	<6 month	6 month	>6 month
Age				
18-21	46	3	34	9
22-25	103	7	75	21
26-29	41	1	34	6
30 & above	3	0	3	0
Education of mother				
Illiterate	132	6	104	22
Primary	48	3	34	19
Secondary	8	2	3	3
Higher secondary	5	0	5	0
Graduate	0	0	0	0
Post-graduate	0	0	0	0
Socio-economic status				
Class I (>5571)	0	0	0	0
Class II (5570-2786)	0	0	0	0
Class III (2785-1761)	0	0	0	0
Class IV (1760-836)	23	3	14	6
Class V (<835)	170	8	132	30
Gender				
Male child	92	3	73	16
Female child	101	8	73	20
Total	193	11	146	36

DISCUSSION

The World Health Organization recommends that breastfeeding be initiated within 1 hour of birth. Early initiation of breastfeeding (within 1 hour) provides benefits for both the baby and the mother. The Baby friendly Hospital Initiative (BFHI) was designed to promote early initiation of breast feeding; preferably immediately after birth and initiation of breast feeding within one hour of birth was one of the ten steps of successful breastfeeding.[9]

Despite these recommendations, only 39% of newborns in the developing world are, put to the breast within one hour of birth, and only 37% of infants under-six months of age are exclusively breastfed.[10]

In the present study more than 70% i.e. 138 (71.50.48%) of mother initiated breast feeding within 1 hour after the birth. Lower percentage of initiations of breast feeding within 1 hour was reported by other researcher Khan et al (63%and 57.9%), Shwetal et al (32.6%) Rawal et al.[11-13]

However Higher rate of initiation of breast feeding within 1 hour (92%, 97%) were presented by Madhu et al and Ekambaram et al this difference may be due to local culture beliefs and practices that existed in particular regions.[14,15]

The findings of Ghana study (2006) clearly showed that initiation of breast feeding within one hour could cut 22% all neonatal mortality; assume a great importance.[16] The use of colostrums and avoidance of pre lacteal food are the cornerstone in early infants nutrition and may be prerequisite for the establishment of future of breast feeding. Prelacteal food was defined as food/liquid given to infant before initiation of breast feeding for the first time.[17]

We found that the prevalence prelacteal feed was much lower (26.94%) in our study. Other researcher reported, Khan et al (80%), Yadavannavar et al (92.25%), Rawal et al (61.9%) and Singh et al (47%).[11,13,17] Certain social customs prevalent among the lower socioeconomic group were also found to be responsible prelacteal feeding practices. Majority of women use still using Ghutti, Honey and sugar water [18]

In the present study most commonest prelactal feed was Honey (48.07%) similar finding was also reported by Meshram et al but contrast finding was reported by Umar et al mother was awaited for establishment for clean and safe milk so during this period they give animal milk, boiled water, boiled leaf extract, and sometime honey.[18,19]

In the present study caesarian section, delivery complication, baby was in NICU & Milk not produce immediately was the reasons for late initiation of breast feeding however other researcher reported Rawal caesarian section (23%), mother was ill (9.6%), baby was in NICU (11.5%), less secretion of milk (13.5%), Mamatarani et al delay in initiation of breast feeding due to occurrence of to many delivery in labour room and team of doctors and nurses give priority to shifting the mother to indoor ward and late motivation of mother.[13,20] In contrast to this finding, Bhardwaj et al reported that the commonest reason for not giving the colostrum.[21] Bhatt was reported most common cause caesarian section (29.7%) and fatigue (21.1%) respectively.[12] It was also noticed that 76.58% of mothers were lean towards commercial baby food products. Literacy had little effect on knowledge of breastfeeding among mothers.

Exclusive breastfeeding is safe, easy economical and emotionally satisfying means of feeding babies, particularly in developing country like India. Present study revealed that almost 89% of mothers have started exclusive breast feeding while remaining 11% mothers have given honey as pre lacteal feed. So, in present study the initiation of exclusive breastfeeding was in 89%, which was higher than the national data, while prelacteal feed was 11% which was lower than the national data which was encouraging.[22]

CONCLUSION

It is the universally accepted that breastfeeding is the best infant feed with benefits the infant and the mother. Being economical, it is beneficial for the developing countries, particularly amongst the lower socioeconomic groups. Some cultural practices like giving prelacteal feeds, giving breastfeeding late after birth, starting supplementary foods early and avoiding exclusive breastfeeding have definitive impact on many mothers. The study shows that the mothers lacked knowledge regarding breastfeeding practices, some cultural belief, etc. Despite higher rates of early initiation of breastfeeding and exclusive breastfeeding, awareness of the benefits of exclusive breastfeeding was low. This indicates the need to promote awareness of the correct method of infant feeding and care of the newborn. Creating an awareness of the advantages of exclusive breastfeeding will further strengthen and support this common practice in rural communities and avoid an early introduction to complementary foods for socio cultural reasons.

Recommendation

There is a need for health education program aimed at educating mothers on:

1. Initiation of breast feeding within ½-1 hour after birth.
2. Exclusive breast feeding till 6 months of age.
3. Importance of night feed and colostrum.
4. Continue breast feeding till 2 years.
5. Feed completely on one side at a time
6. Support for proper attachment and positioning. Obstetricians are likely to have more influence on breastfeeding initiation and pediatricians on breastfeeding durations. Training programs regarding breastfeeding should be developed for the implementation in obstetric and pediatric residents and also nursing staffs.

Strengthening of information, education & counseling for antenatal women with active involvement of accredited social health activist (ASHA)/Aganwadi Workers (AWW)/auxiliary nurse midwives (ANM) regarding timely initiation of breastfeeding following delivery, duration of exclusive breastfeeding, and importance of feeding colostrum. This study highlights the need to educate mothers regarding breastfeeding during antenatal visits, including the spouses for support, as the mother is more receptive during her pregnancy and has good interaction with the health care provider. Routine examination of the mother including examination of the breasts for inverted nipples, flattened nipples followed by breastfeeding counseling and improvement in infrastructure will lead to a successful breastfeeding initiation.

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