

Original Research Article

A comparison of breast feeding practices among urban and rural areas of Rangareddy district of Telangana

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ABSTRACT

Background: Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development.

Methods: A community based cross sectional study was conducted among 800 mothers from urban and rural areas of Rangareddy District. A pre designed pre tested questionnaire was used to interview the mothers. Questionnaire contained questions related to demographic factors and breast feeding practices. Institutional Ethical clearance was taken.

Results: The overall prevalence of exclusive breast feeding was 65%, being comparatively more in rural area (68%) which was statistically significant. Colostrum was discarded by 15% mothers in urban and 9% in rural area. Breast feeding was initiated within 1 hour in 184 (46%) in urban area and in 148 (37%) in rural area.

Conclusions: Though mothers from rural area had certain favorable breast feeding practices such as demand feeding, colostrum being given but still various inappropriate practices were prevalent in both rural and urban areas.

Keywords: Breast feeding practices, Urban, Rural, Factors, Colostrum

INTRODUCTION

Breastfeeding is the natural way of providing young infants with the nutrients they need for healthy growth and development. Virtually all mothers can breastfeed, provided they have accurate information and the support of their family, the health care system and society at large.¹

Colostrum, the yellowish, sticky breast milk produced at the end of pregnancy, is recommended by World Health Organization (WHO) as the perfect food for the newborn, and feeding should be initiated within the first hour after birth.²

Breast milk promotes sensory and cognitive development, and protects the infant against infectious and chronic diseases. Exclusive breastfeeding (EBF)

reduces infant mortality due to common childhood illnesses such as diarrhoea or pneumonia, and results in quicker recovery during illness.^{3,4}

EBF is recommended up to six months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond. Despite awareness regarding advantages of breast feeding, its rates often fall short of recommended practice. According to the report of the district level household survey (DLHS 4) 2012-13, the percentage of exclusively breast feeding is 62.8%, (Rural 60.3% & Urban 66.7%) in Telangana state.⁵

Compared with state percentage, the percentage in Rangareddy district is however much lower 52.5% which could be due to various socio cultural factors that differ from region to region.⁶

Hence the present study has been designed to know the breast feeding practices and to determine the factors responsible for it so that, proper Information, Education, Communication (IEC) can be planned in the region accordingly.

Objectives

- 1) To enumerate the socio-demographic profile of study population.
- 2) To assess the breast feeding practices among mothers.

METHODS

Study design

Community based cross sectional study.

Study area

The present study was conducted in Peddamangalaram, a rural field practice area and Lungerhouze an urban field practice area of Department of Community Medicine, Bhaskar Medical College.

Study population

Mothers with children in the age group of 0- 24 months.

Study period

6 months between October 2015 to March 2016

Sample size

According to DLHS 4 (2012-13) report, the percentage of children who were exclusively breastfed in Ranganreddy District was 52.5%. With absolute error of 5% and by applying the formula $n=4 pq/d^2$, sample size was worked out as 400. Hence 400 mothers were selected each from rural and urban areas making a total sample size as 800.

Selection criteria

Inclusion criteria

Mothers with children in the age group 0-24 months who were willing to participate in the study.

Exclusion criteria

Mothers not available in the household at the time of the visit, those who were sick and mothers with sick children.

Study tools

A pre designed pre tested questionnaire was used to interview the mothers. Questionnaire contained questions

related to demographic factors and breast feeding practices.

Definitions of exclusive breast feeding, pre dominant, partial breastfeeding and other relevant definitions were followed as per WHO guidelines.⁷

Ethical consideration

Ethical clearance was taken from Institutional Ethics committee, Bhaskar Medical College prior to start of the study.

An informed written consent was taken from the mothers included in the study.

Data analysis

Data was entered and analyzed using EPI INFO version 7. Frequency tables and graphs were used to represent data. Data was summarized in percentages. Univariate analysis using Chi-square test with significance level at 5% was used to determine the association of various independent factors.

RESULTS

Socio demographic profile

A total of 800 mothers, 400 from urban and 400 from rural areas were interviewed for the study. Mean age of mothers in urban areas was 24.57 ± 2.532 years and from rural areas it was 24.77 ± 2.725 years and majority belonged to 20-25 years age group. In both areas, majorities (93% from urban & 87% from rural) belonged to Hindu religion and were literate. Seventy one percent from urban areas belonged to nuclear family whereas in rural areas fifty percent were from joint & three generation family. Majority (63% from urban & 76% from rural) of the mothers were homemakers in both urban and rural areas.

Breast feeding practices

The overall prevalence of exclusive breast feeding was 65% and the percentage was comparatively more in rural area (68%) which was statistically significant. Among the various demographic profiles, literacy status of the mothers had significant relationship with EBF with more percentage of literates following EBF than illiterates ($p = 0.002$).

Colostrum was discarded by 15% mothers in urban and 9% in rural area which again was significant statistically. With regards to time of initiation of breastfeeding, feeding was initiated within 1 hour in 184 (46%) in urban area and in 148 (37%) in rural area. The main reason for delay in initiation was in both areas was delayed initiation.

Prelacteal feeds were given in more than one fourths (17%) of the study population. Majority of the babies were given honey (34.6%) followed by animal milk and

sweetened water. Demand feeding was more in rural area comparatively (96%).

Table 1: Distribution of study population according to socio demographic variables.

Socio demographic variables	Urban (n=400)	Rural (n=400)
Age (years)		
<20	24 (06%)	20 (05%)
20-25	232 (58%)	216 (54%)
>25	144 (36%)	164 (41%)
Religion		
Hindu	372 (93%)	348 (87%)
Muslim	20 (05%)	44 (11%)
Christian	08 (02%)	08 (02%)
Type of family		
Nuclear	284 (71%)	200 (50%)
Joint and Three generation	116 (29%)	200 (50%)
Literacy status of mother		
Illiterate	20 (05%)	48 (12%)
Literate	380 (95%)	352 (88%)
Occupation		
Home maker	252 (63%)	304 (76%)
Labourer	88 (22%)	36 (09%)
Others	60 (15%)	60 (15%)

Table 2: Distribution according to breast feeding practices.

Breastfeeding practices	Urban	Rural	p value*
Prelacteal feeds given			
Yes	72 (18%)	64 (16%)	0.2
No	328 (82%)	336 (84%)	
Colostrum given			
Yes	340 (85%)	364 (91%)	0.004*
No	60 (15%)	36 (09%)	
Initiation of breast feeding after delivery			
<1 hour	184 (46%)	148 (37%)	0.03*
1-4 hours	188 (47%)	220 (55%)	
>4 hours	28 (07%)	32 (08%)	
Exclusive breast feeding (EBF)			
Yes	248 (62%)	272 (68%)	0.03*
No	152 (38%)	128 (32%)	
Feeding schedule			
Demand feed	344 (86%)	384 (96%)	0.0000002*
At regular intervals	56 (14%)	16 (04%)	

*p <0.05 considered statistically significant.

Table 3: Reasons for discontinuation of breast feeding before six months among study population.

Reason	Percentage
Insufficient milk	15.4%
Illness of baby	07%
Cracked nipple and infection	3.2%
Others	1.5%

The reasons given for discontinuing breast feeding before six months in the study population were insufficient milk (15.4%), illness of baby (7.8%), cracked nipple and infection (3.2%) and others (1.5%).

DISCUSSION

World breast feeding week, celebrated every year from 1-7 August, is an annual event highlighting the critical importance of breastfeeding for children across the globe. Breastfeeding gives children the healthiest start in life and is one of the simplest, smartest and most cost-effective ways we have of ensuring that all new born children survive and thrive.

The present study which has been done to compare the breast feeding practices between an urban and rural area has found that the overall prevalence of EBF as 65% and the percentage was comparatively more in rural (68%) compared to urban area (62%). This is in contrast to common belief that mothers from urban areas breast feed better than rural area due to various factors such as literacy and various sources of information on breast feeding resulting in greater awareness.

This finding is similar to study by Kumari, Muralidhar where EBF in infants above 6 months of age was better in rural area (60.6%) than in urban area (47.6%).⁸

In contrast to the study finding, a study by Ashwini et al found that mothers from urban area appeared better in all the aspects of breast feeding than rural area.⁹

With regards to prelacteal feeds, in the present study prelacteal feeds were given in about one fourths of the study population. Majority of the babies were given honey (34.6%). Ashwini et al observed that prelacteal feeds were given by almost same proportion of 54.25% mothers in urban and 57.11% mothers in rural areas.⁹

In the present study, colostrum was discarded by 15% mothers in urban and 9% in rural area which was significant statistically. In a similar kind of study by Obulareddy, Narrreddy observed 11.8% mothers discarded colostrums.¹⁰ In rural areas 20% mothers discarded colostrums, whereas 5% of urban mothers discarded. Another study by Ashwini et al 14.75% from urban and 25.79% rural mothers discarded the colostrum.⁹

With regards to time of initiation of breast feeding, breast feeding was initiated within 1 hour in 184 (46%) in urban area and in 148 (37%) in rural area. Similar findings were seen by Ashwini et al where breast feeding was initiated within 1 hour in 42.5% in urban area and in 42.9% in rural area.⁹

In the present study, the reasons given for discontinuing

breast feeding before six months were insufficient milk (15.4%), illness of baby (7.8%), cracked nipple infection (3.2%) and others (1.5%). Study by Joshi et al (2014) found that insufficient milk was the main reason for discontinuation of breastfeeding within 6 months duration among 49.49% of study subjects while it was seen that 70.49% had discontinued breastfeeding during 6-12 months because they had started weaning food.¹¹ Another common, yet preventable reason for discontinuations of breast feeding before 6 months was the occurrence of cracked nipples seen in 14.54%.

CONCLUSION

Though mothers from rural area had certain favorable breast feeding practices such as demand feeding, colostrum being given but still various inappropriate practices such as delayed initiation of breast feeding, pre lacteal feeds are prevalent in both rural and urban areas. Hence an effective, accurate and need based communication on breast feeding particularly during the pregnancy period through mother craft clinics should be encouraged. Also during the post natal visits by health workers, measures should be taken to improve the breast feeding practices.

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