

Original Research Article

A study on breast feeding practices among mothers in urban field practice area of tertiary care center, Hyderabad

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ABSTRACT

Background: Breastfeeding is the best preventive intervention and has potential impact on child mortality. Breast-milk is safest, least allergic and has nutritional, immunological, behavioural and economic benefits. It also provides desirable mother baby bonding. Early human milk promotes gut maturation and immune activation in infants. Despite of the demonstrated benefit of breastfeeding, the duration and prevalence are still low in first six months of life. The objectives of the study were to estimate the prevalence of exclusive breastfeeding practices among study population; to assess awareness regarding colostrum; to assess the socio demographic profile among mothers of 0-2 years children.

Methods: A cross sectional study was conducted in the urban field practice area of tertiary health care center, Hyderabad. 100 mothers having children between 0-2 years age group were included by using simple random technique. Predesigned questionnaire was used to collect data.

Results: Mean age group (yrs) of the mothers was 25.6 ± 3.81 , literate mothers are 81%, illiterates are 19% and employed mothers were 68%. Awareness regarding exclusive breastfeeding was more among literates than illiterates ($p < 0.05$). Literacy status had no association regarding knowledge on colostrum among study subject. Pre lacteal feeds were practiced among 32% of mothers before initiation of breast feeding. The practice of prelacteal feeds were more in primi than multi para mothers ($p < 0.05$). Practice of burping after the breastfeeding were followed by 71%. Mothers practicing correct positioning during breastfeeding were 63%.

Conclusions: Among study subject 75% of them were given colostrum. Exclusive breastfeeding upto 0-6 months was practiced by 64% of mothers.

Keywords: Breastfeeding, Colostrum, Mothers, Infants, Prelacteal feeds

INTRODUCTION

Exclusive breastfeeding is defined as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for 6 months of life, but allows the infant to receive ORS, drops and syrups (vitamins, minerals and medicines).^{1,2} To achieve global goal for optimal child health and nutrition, all women should be enabled to practice exclusive breastfeeding

(EBF), and all infants should be fed exclusively on breast milk from birth to 6 months of age.^{1,2} According to WHO 2017 (August) fact sheet, it is estimated that only 40% of infants below age of 6 months are exclusively breastfed. As per NFHS 4 (2015 -2016) prevalence of exclusive breastfeeding in India under 6 months age is 54.9% (urban=52.1%, rural=56%). The prevalence of exclusive breast feeding in Telangana is 67.3% {(68%) urban and (66.8%) rural} According to the report of UNICEF 2018,

(February), every year 26 lakh babies die worldwide within 28 days of birth, which is an average of 7,000 deaths every day. Of these, 6.4 lakh neonatal deaths occur in India. The neonatal mortality rate at 25.4 deaths per 1,000 live births in India makes it 12th worst among the 52 lower-middle-income countries. UNICEF & WHO optimal breastfeeding consists of 1) early initiation of breastfeeding within 1 hour or as early as possible after birth; 2) exclusive breastfeeding for the first 6 months of life; 3) continuation of breastfeeding up to 2 years of age along with supplementary feeds. Despite its demonstrated benefits, the practice of exclusive breastfeeding is not common in many developing countries including India.⁴ The factors that influence initiation, maintenance and duration of breastfeeding are social and cultural traditions, infant maturity at birth, degree of commitment, and literacy of the mother. Breastfeeding is a universal phenomenon in India, but breast feeding practices are far from optimal because they are influenced by socioeconomic factors, cultural background, psychological status, religious values, illiteracy, ignorance, lack of access to antenatal and postnatal care, inadequate training, knowledge and skills of breastfeeding.⁴ In present generation every second woman is employed due to which there is alter in proper breastfeeding practices. Exclusive breastfeeding can prevent 823,000 annual deaths or 13.8% of all deaths of infants younger than 24 months, and the aim is that the breastfeeding coverage be scaled up to universal levels (90%).⁶ Adolescent pregnancies are of concern worldwide since they often lead to obstetric or neonatal complications.⁷ According to the World Health Organisation (WHO), every year there are approximately 15 million pregnancies in young women aged between 15 and 19 years. There are some areas still they are practicing of pre lacteal feeds as their cultural practice which in turn leads to infections, gastrointestinal irritation and affecting the growth and development of the children from the early age group. The aim of this study was to assess the knowledge and practices followed by mothers of urban slums. Slums are unserved and underserved pockets in urban areas and this aspect of health education too needs special emphasis in such areas to reduce mortality and morbidity.³

METHODS

A community based cross sectional study was conducted in urban slums of urban field practice area of tertiary care centre, Hyderabad. Institutional ethics committee approval was taken for conducting the research. Considering the prevalence 67% from NFHS (2015-2016) data with 95% confidence and a precision of 10.5%, a sample size of 77 was obtained, rounded to 100 mothers. By using simple random technique mothers were contacted with the help of locally assigned ASHA (accredited social health activist) and informed consent was taken by explaining the survey on breastfeeding practices and benefits of exclusive breastfeeding for both mother and children. Data was collected by interview and

assessing the practices. The study was carried for a period of three months (August to October, 2018).

Inclusion criteria

Permanent resident mothers of 0-2 year aged children who were willing to give information.

Exclusion criteria

Non-resident and who were not willing to give information and mothers who were bed ridden for any complication.

Study tool

A semi structured pre designed pre tested questionnaire was used to collect data. House to house survey was done until the sample size was reached.

Statistical analysis was done by using Microsoft excel version 2017 and Epi info 7.2 version.

RESULTS

Socio demographic profile of the study population: Mean age group (yrs) of mothers was 25.6±3.81 SD. Mothers employed were 68 (68%). Hindu religion constituted 59 (59%) of the study population. Study group belonged to joint family 61 (61%) followed by nuclear family 32 (32%). As study was conducted in urban slums, most of them belonged to middle class 33 (33%) socio economic status by using modified BG Prasad's classification in (Table 1). There were 38 (38%) of teenage marriages which lead to 29 (29%) teenage (early/high risk) pregnancies. literate mothers were 81 (81%). Mothers with one child were 38 (38%), whereas with two children 44 (44%), three children constituted to 15 (15%) and 3 (3%) mothers were having >3 children. Early infants (0-6 months) participated in this study were 19 (19%), (7-12 months) were 23 (23%), age group of (13-18 months) were 38 (38%) and 19-24 months were 20 (20%).

Colostrum

Awareness on colostrum uses reported by 77 (77%). Bivariate analysis on awareness on colostrum and its advantages among literates 66 (81.4%) and illiterates 11 (57.8%) is insignificant ($p>0.05$) (Table 2). Mothers gave colostrum were 75 (75%). Colostrum discarded by (25%) mothers due to their false beliefs. Pre lacteal feeds before initiation of breastfeeding were given by 32% of mothers out of which 7% of them were given due to the delay in the onset of lactation. The main reason reported for the practice of pre lacteal feeds was found to be traditional belief (25%). Among 32 mothers who gave pre lacteal feeds, 87.5% (28 mothers) gave honey as pre lacteal feed and 13% (4 mothers) gave sugar water. Practice of pre lacteal feed is significantly more in primi ($p<0.05$) (Table 3). Univariate analysis on early initiation of breastfeeding

as soon as possible was given by 20 (20%) mothers, within 1-2 hrs of gap given by 27 (27%) mothers, 34 (34%) mothers given after 5-6 hrs, (19%) initiated breastfeeding the next day.

Table 1: Socio demographic profile of the study population.

Mean age group of mothers	25.6±3.81
	N (%)
Age group of children (in months)	
1	3 (3)
2-6	16 (16)
7-12	23 (23)
13-18	38 (38)
19-24	20 (20)
Occupation	
Employed	68 (68)
Unemployed	32 (32)
Religion	
Hindu	59 (59)
Islam	35 (35)
Christian	6 (06)
Type of family	
Nuclear	32 (32)
Joint	61 (61)
Third generation family	7 (7)
Literacy status	
Literate	81 (81)
Illiterate	19 (19)
Socioeconomic status (modified BG Prasad classification)	
Upper	12 (12)
Upper middle	28 (28)
Middle	33 (33)
Lower middle	20 (20)
Lower	7 (7)
Age at marriage (in years)	
<20	38 (38)
>20	62 (62)
Parity	
1 child	38 (38)
2 child	44 (44)
≥3 child	18 (18)

Exclusive breastfeeding

The frequency of breastfeeding reported among mothers on demand was 51 (51%), at regular intervals irrespective of need for the baby was 33 (33%) and at 4-5 hrs intervals was reported among 16 (16%). Overall 64 (64%) mothers followed exclusive breastfeeding practices up to 6 months among which exclusive breastfeeding was practiced by employed mothers are 38 (38%).

There is significant association (p<0.05). Table 2 is showing mothers who were educated had more knowledge on exclusive breastfeeding than uneducated mothers.

Among literate mothers, 28 (34.5%) were aware of the importance of positioning while feeding and importance of burping reported by 59 (72.8%) mothers (Figure 1). Whereas in illiterate mothers, importance of positioning while feeding was reported by 8 (42.1%) and importance of burping reported by 12 (66.6%). Practice of correct position during breastfeeding was showing significant association with literacy status (p=0.001) and upper socio-economic status (p<0.05) (Table 2). Literate mothers who were having knowledge on mother benefits of exclusive breastfeeding, breast cancer prevention reported by 25 mothers, lactational amenorrhoea by 2 and 1 reported on prevention on ovarian cancer, none of them reported the prevention of osteoporosis & prevention of cervical cancer. Breast hygiene practices were reported by 79 (79%) of mothers. Mothers started started weaning after 6 months with continuation of breastfeeding along with supplementary feeds 61 (61%). Irrespective the method (correct\incorrect) of practicing the exclusive breastfeeding. the Source of knowledge regarding breast feeding practices reported by mothers is 40% through family, 28% through own knowledge, 17% through health team. In the present study, only 58% were aware of health schemes available in states (KCR kit, ICDS etc) and among them only 40% were availing them.

Table 2: Association of socio-demographic factors on knowledge and practice of colostrum and exclusive breastfeeding practices.

	Knowledge on colostrum		Chi-square	Knowledge on exclusive breast feeding		Chi-square	Knowledge on mother benefits of Exclusive breast feeding		Chi-square	Practicing positioning during breast feeding		Chi-square
	(+)	(-)		(+)	(-)		(+)	(-)		(+)	(-)	
Literates	65	15	X ² =3.53	49	32	X ² =5.19	28	53	X ² =0.47	57	24	X ² =9.93
Illiterates	11	08	P=0.06	06	13	P=0.022*	05	14	P=0.49	6	13	P=0.001*
High SES	33	07	X ² =1.13	20	20	X ² =0.67	15	25	X ² =0.6	20	20	X ² =4.8
Low SES	44	16	P=0.28	35	25	P=0.411	18	42	P=0.43	43	17	P=0.02*

Table 3: Association of socio-demographic factors on knowledge and practice of pre lacteal feeds.

	Prelacteal feeds		
	(+)	(-)	
Age at marriage (in years)			
<20	15	23	X ² =1.573
>20	17	45	P=0.209
Parity			
Primi	20	18	X ² =11.9
Multi	12	50	P=0.0005*

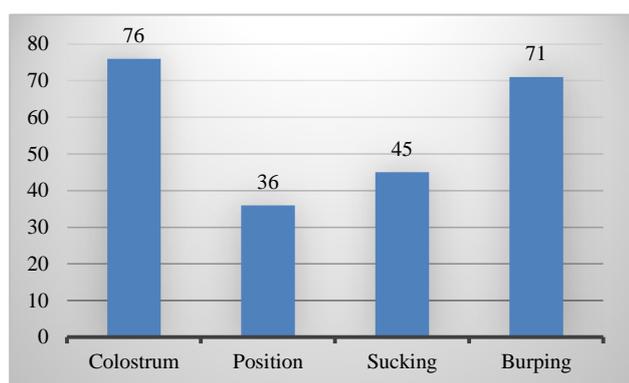


Figure 1: Distribution of knowledge on breastfeeding practices.

DISCUSSION

There are various studies on breastfeeding practices throughout India and foreign countries. Still the prevalence and exclusive breastfeeding coverage scale up to (90%) not achieved in various parts of India.⁶ Factors contributed mainly were, lack of knowledge, early age at marriage, teenage pregnancy, lack of knowledge on breastfeeding practices, incorrect spacing of birth intervals. The study conducted by Velusamy et al, in mean age (yrs) was 23.9±3.8 SD.⁶ The present study also included the same age (yrs) group 25.6±3.81 SD. The early marriages in this study reported were 38% which may be one of the reason for incomplete coverage on exclusive breastfeeding practices, however we couldn't elicit the association on exclusive breastfeeding practices. A study conducted by Pillay et al has shown multi variate analysis on early cessation of breastfeeding in teenage pregnancy.⁷ Source of information on breastfeeding practices which is 40% from family source of the study subjects may lead to study subjects to follow false beliefs on discarding colostrum and which also might be the reason for giving pre lacteal feeds in newborns. In the present study colostrum fed babies was 75%, the practice of colostrum was practiced more among multipara mothers. The practice was more compared to study by Davara et al (68.75%).⁸ The study by Rahman et al showed that only 13% discarded the colostrum.¹¹ In this study, importance of positioning while breastfeeding was

reported by 36% (28 literates+8 illiterates). Though the level of knowledge noticed was low, the practice of correct positioning was noticed among 63%. The similar result shown in study conducted by Hiregoudar et al (65%).¹⁰ A study by Davara et al showing 13 mothers out of 32 were able to practice correct position.⁸ Exclusive breastfeeding practices upto 6 months followed by mothers in this study was 64%, which was more compared to the study by Velusamy et al reported in one tenth of mothers.⁶ Study conducted in urban parts of India by Deshmukh et al, reported 25% Exclusive breastfeeding practices upto 6 months.¹² A different pattern was shown in foreign countries Sri Lanka 49.1%, Maldives 41% and Nepal 29.7%.⁶ Prelacteal feeds given in present study was 34 (34%) which was less compared to study by Meshram showing 45%.⁹ And initiation of breastfeeding within 1-2 hrs was practiced by 47% which was more in this study when compared to study by Meshram which reported 22%.⁹

CONCLUSION

In present study, 75% has taken colostrum and 64% are exclusively breastfed. Mothers education status had significant role in knowledge about exclusive breast feeding (EBF) but had no significant role on knowledge about colostrum and benefits of mothers. 32% of the children were given pre lacteal feeds which will have major impact on baby health (infection, gut maturation). And importance of position during feeding was reported by 36%. This demands strengthening the health team for creating awareness on the importance of positioning during breast feeding and its role in preventing diseases. Early initiation (upto 1 hour) of breast feeding followed by 47% of the mothers. Importance of early initiation of breastfeeding, colostrum and exclusive breastfeeding should be educated through information, education communication activities and avoidance of pre lacteal feeds should be focused more.

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