



A CROSS-SECTIONAL STUDY ON AWARENESS OF HEALTHY BREASTFEEDING PRACTICES AND THEIR DETERMINANTS AMONG ANTENATAL MOTHERS IN URBAN SLUMS OF HYDERABAD

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ABSTRACT

Background: Breast milk is the most complete natural food available for the baby. Correct and healthy breast feeding practices were proved to be life saving for children and also proved to reduce neonatal mortality and morbidity. Avoiding pre-lacteal feeds, giving colostrum to the baby, avoiding artificial teats and pacifiers and demand on feeding are some of the healthy breastfeeding practices that should be practiced by postnatal women. If these practices are made aware of in the antenatal period itself, they will be practiced well in the postnatal period. Hence this study was intended to find the awareness and determinants of breastfeeding practices in antenatal women.

Methodology: A cross-sectional descriptive study was done in urban family welfare clinics, Hyderabad. Study was done during August 2015 - January 2016. Sample size of 160 was derived and subjects were selected using systematic random sampling. Data collection was done by interviewing the participants using pre-tested semi structured questionnaire and analyzed using MS Excel 2016 version.

Results: The awareness about harmful nature of pre-lacteal feeds and timing of initiation of breastfeeding was poor among study participants. Majority of the antenatal women had good knowledge regarding frequency of breastfeeding. Primigravidae were less aware of the healthy practices than multigravidae.

Conclusion: Most of the problems of breast feeding can be overcome and neonatal mortality and morbidity can be reduced if the woman is informed in the antenatal period itself about the healthy breastfeeding practices.

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INTRODUCTION

Breast milk is the most complete natural food available for the baby. Correct and healthy breast feeding practices were proved to be life saving for children and also proved to reduce neonatal mortality and morbidity. The practice of giving substances other than breast milk to newborn babies is a common cultural practice found across the world [1]. When the babies are given such fluids/foods, even before lactation has been initiated, it is called pre-lacteal feeding, and those foods are called pre-lacteal feeds [2]. In India, pre-lacteal feeds that are usually given include honey, sugar water, ghee, milk from cow or other animals. The pre-lacteal feeds chosen vary according to cultures which may be specific to a family, caste, or religious group [3]. Honey which is one of the most common pre-lacteal feeds in India, is a source of dangerous organisms like *Clostridium botulinum* which leads to infant botulism [4]. Pre-lacteal feeds also increase the risk of acute respiratory tract infections [5] and diarrhea [6] and childhood stunting [7].

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WHO recommends that newborns should be put on breastfeeding within one hour after birth and exclusively breastfed for six months [8]. But introduction of pre-lacteal feeds itself means that the child is not exclusively breastfed and the child will not be breastfed within one hour. Hence these children will also be at risk of various diseases such as neonatal sepsis due to delayed initiation of breastfeeding and risk of neonatal mortality [9]. Colostrum, the first milk after delivery, has several advantages like providing the passive immunity to child against various diseases and also many chronic diseases [10]. Artificial teats if used can increase the chance of infection in infants [11]. Though different factors were noted to affect breast feeding practices, it was mainly related to maternal characteristics such as illiteracy, poor socio economic status, older maternal age and maternal unemployment [12]. Most of the breastfeeding practices can be improved if the mothers are properly guided and educated during the antenatal period itself. Among the antenatal mothers, target groups for health education and follow up visits in postnatal period can also be identified if the determinants of breast feeding practices are well understood. Hence this study was intended to assess the awareness about various breast feeding practices and also to identify the factors which determine this awareness in antenatal women.

Objectives

1. To assess the awareness about healthy breast feeding practices among antenatal women attending urban family welfare clinics, Hyderabad.
2. To identify specific factors which determine the awareness regarding various breast feeding practices among the study population.

METHODOLOGY

A cross sectional study was conducted among antenatal women attending urban family welfare clinics in urban slums of Hyderabad during August 2015 to January 2016. Taking the awareness as 50%, confidence interval 95% and absolute precision as 8%, sample of 157 (rounded off to 160) was arrived and systematic random sampling was done until the sample size was reached. Every third woman was included in the study after taking consent and personally interviewed using the predesigned, semi structured questionnaire.

RESULTS

Out of the total study population, only 18.75% were aware about the harmful nature of pre-lacteal feeds (Table1) and 45% were aware about the advantages of colostrums (Table2). About one third of the study population had correct knowledge regarding timing of initiation of breastfeeding (Table3). Most of the study population were aware about the harmful nature of artificial teats (Table4). About 63% of the women knew about the concept of demand feeding and 27% did not have any idea about frequency of feeding. (Chart1)

Table 1 Knowledge regarding harmful nature of pre-lacteal feeds

Prelacteal Feeds Harmful	Frequency	Percentage
Yes	30	18.75%
No	104	65%
Don't know about pre-lacteal feeds	26	16.25%
Total	160	100 %

Table 2 Knowledge regarding advantages of colostrums

Advantages of Colostrum	Frequency	Percentage
Know	73	45.63%
Don't know	87	54.37%
Total	160	100%

Table 3 Knowledge regarding timing of initiation of breastfeeding

Initiation of Breastfeeding	Frequency	Percentage
Within half an hour	23	14.38%
Within 1 hour	24	15.00%
Between 1-4 hours	23	14.38%
>4 hours	13	8.13%
>1 day	18	11.25%
Don't know	59	36.88%

Table 4 Knowledge regarding harmful nature of using artificial teats:

Artificial teats	Frequency	Percentage
Can be used	20	12.5
Should not be used	138	86.25
No idea	2	1.25

Knowledge on various feeding practices in Antenatal women

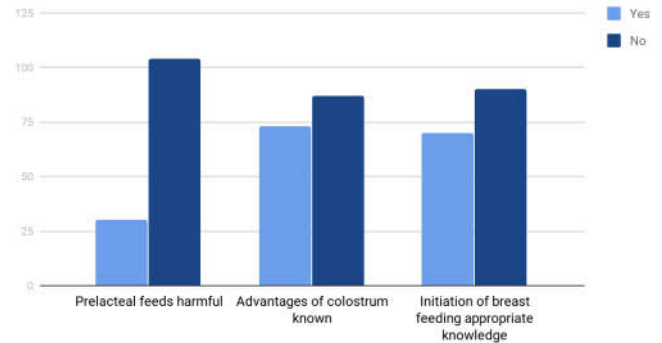


Chart 1 Chart showing knowledge on various feeding practices in antenatal women.

Table 5 Association between Sociodemographic factors and knowledge regarding prelacteal feeds (harmful or not harmful and can be given to baby) (Excluded women who do not know about prelacteal feeds, N= 134)

Variable	Socio demographic factors	Prelacteal feeds are not harmful	Know the harmful nature of prelacteal feeds	Total	Relative risk	P value
Age	<20 years	38 (86.3%)	6 (13.6%)	44	3.2	<0.0001
	>20 years	24 (26.6%)	66 (73.3%)			
Religion	Hindu	82 (77.3%)	24 (22.6%)	106	0.98	0.45
	Islam	22 (78.5%)	6 (21.4%)			
Literacy status	Illiterate	27 (79.4%)	7 (20.6%)	34	1.03	0.39
	Literate	77 (77%)	23 (23%)			
Type of family	Joint	61 (79.2%)	16 (20.8%)	77	1.05	0.3
	Nuclear	43 (75.4%)	14 (24.6%)			
Employment status	Unemployed	104 (78.7%)	28 (21.3%)	132	-	<0.05
	Employed	0	2 (100%)			
Order of pregnancy	First	8 (15.6%)	43 ((84.3%)	51	-	0.11
	Second	17 (31.4%)	37 (68.5%)	54		
	Third or more	5 (17.2%)	24 (82.7%)	29		

Table 6 Table showing association of various factors with knowledge regarding initiation of breastfeeding (N= 160)

Various factors	Independent variables	Appropriate knowledge	Inappropriate knowledge	Total	Odds ratio	P value
Age	<20 years	15 (27.3%)	40 (72.7%)	55	0.5	<0.001
	>20 years	55 (52.4%)	50 (47.6%)	105		
Religion	Hindu	56 (43.4%)	73 (56.6%)	129	0.96	0.8
	Islam	14 (45%)	17 (55%)	31		
Literacy status	Literate	50 (40%)	75 (60%)	125	0.7	<0.05
	Illiterate	20 (57.1%)	15 (42.9%)	35		
Family type	Joint	40 (45.5%)	48 (54.5%)	88	1.09	0.63
	Nuclear	30 (41.7%)	42 (58.3%)	72		
Employment status	Employed	1 (12.5%)	7 (87.5%)	8	0.2	<0.05
	Unemployed	69 (45.4%)	83 (54.6%)	152		
Order of pregnancy	First	9 (13.4%)	58 (86.5%)	67	-	<0.00001
	Second	37 (60.65%)	24 (39.3%)	61		
	Third or more	24 (75%)	8 (25%)	32		

*Initiation of breastfeeding if told below 4 hrs was taken as appropriate knowledge

Table 7 Association between Socio-demographic factors and knowledge regarding colostrum and its advantages (N = 160)

Various factors	Independent variables	Known	Unknown	Total	Odds Ratio	P value
Age	<20 years	14 (19.2%)	59 (80.8%)	73	0.4	<0.001
	>20 years	41 (47.1%)	46 (52.9%)	87		
Religion	Hindu	58 (45%)	71 (55%)	129	0.9	0.7
	Islam	15 (48.4%)	16 (51.6%)	31		
Literacy status	Literate	56 (44.8%)	69 (55.2%)	125	0.9	0.6
	Illiterate	17 (48.6%)	18 (51.4%)	35		
Family type	Joint	36 (41%)	52 (59%)	88	0.7	0.09
	Nuclear	37 (51.4%)	35 (48.6%)	72		
Employment status	Employed	2 (18.2%)	9 (81.8%)	11	0.38	<0.05
	Unemployed	71 (46.7%)	81 (53.3%)	152		
Order of pregnancy	First	12 (17.9%)	55 (82.1%)	67	-	<0.00001
	Second	39 (63.9%)	22 (36.1%)	61		
	Third or more	22 (68.7%)	10 (31.25%)	32		

DISCUSSION

Out of the total study population, only 18.75% were aware about the harmful nature of prelacteal feeds and 45% were aware about the advantages of colostrum. This was in contrast with the study in Kerala [13] where 59% were aware of prelacteal feeds and 93% were aware about the advantages of colostrum. In this study, about 30% of them had correct knowledge regarding timing of initiation of breastfeeding.

Most of the study population (86%) were aware about the harmful nature of artificial teats, which was in concurrence with the Kerala study where 78% of the study population were aware. About 63% of the women in this study knew about the concept of demand feeding and 27% did not have any idea about frequency of feeding. In the study done in Kerala [13], 45% of the antenatal women knew about demand feeding. (Tables 1, 2, 3 and 4)

The knowledge regarding advantages of feeding colostrum, harmful nature of prelacteal feeds and timing of initiation of breastfeeding was lower in antenatal women aged less than 20 years compared to women greater than 20 years ($p < 0.05$). It might be due to the lack of experience in child rearing practices in younger women. (Tables 5, 6 and 7)

Interestingly illiterate women were more knowledgeable regarding healthy breastfeeding practices than literate women ($p > 0.05$). The reason for this might be due to more interaction of illiterate with Community health workers who educate them regarding the breast feeding practices. However, a study done in Vellore [14] on post natal women found that more number of illiterate mothers were giving prelacteal feeds compared to literate mothers. (Tables 5, 6 and 7)

In this study, unemployed women who might interact more with Community health workers were more knowledgeable ($p < 0.05$) about the feeding practices compared to employed women who might have less contact with community health workers and have less time to know about the healthy feeding practices. (Tables 5, 6 and 7)

Family type and religion were not significantly associated with knowledge regarding breast feeding practices in this study. In the study done in Vellore [14], prevalence of prelacteal feeds was found to be more in mothers from joint family compared to mothers from nuclear family.

In this study, as the order of pregnancy increased, there is significant improvement in the knowledge of the antenatal women regarding colostrum advantages and initiation of breastfeeding practices (Tables 5, 6 and 7). But in case of harmful nature of prelacteal feeds, there was no significant difference observed in the knowledge as per order of pregnancy. This finding is similar to the study done in Vellore [14].

CONCLUSION

In this study primigravidae were less aware of colostrum and timing of initiation of breastfeeding, and multigravidae were less aware of the harmful nature of prelacteal feeds. Contrary to the common belief that literates and employed women have more knowledge regarding breast feeding practices, it was found that they are the ones who have lesser knowledge compared to illiterate and unemployed women. More research has to be done to verify the findings of this study. Most of the problems of breast feeding can be overcome if the woman is informed in the antenatal period itself about the benefits and healthy practices of breastfeeding. Primigravidae and employed women can be special target group for community health workers in urban slum areas for awareness generation during the antenatal period itself.

References

1. Ajay Gosvami. Analytical study of prevalent and traditional Prelacteal feeding practices and their relevance: *Indian Journal of Preventive and Social Medicine*. 2009; 40
2. Meera Sadagopal. Her Healing Heritage: Study conducted in 7 states of India through LPSS & CHETNA, Ahmedabad, 1986
3. Anuradha Goyle *et al*, Colostrum and Prelacteal feeding practices followed by families of pavement and roadside squatter settlements: *Indian Journal of preventive and social medicine*. 2004; 35(1&2).
4. WHO. Global Strategy for Infant and Young Child Feeding: A joint WHO/ UNICEF statement. Geneva, Switzerland: World Health Organization; 2003
5. Savitha M, Nandeeshwara S, Kumar MP, Raju C. Modifiable risk factors for acute lower respiratory tract infections. *Indian J Pediatr*. 2007;74(5):477-82
6. Gedefaw M, Berhe R. Determinants of childhood pneumonia and diarrhea with special emphasis to exclusive breastfeeding in north Achefer district, northwest Ethiopia: a case control study. *Open J Epidemiol*. 2015;5(02):107.
7. Mengistu K, Alemu K, Destaw B. Prevalence of malnutrition and associated factors among children aged 6-59 months at Hidabu Abote District, North Shewa, Oromia Regional State. *J Nutr Disorders Ther*. 2013;1:1-15.
8. 5. World Health Organisation. Nutrition: Exclusive breastfeeding. [online]. [cited 2013 Oct 12]. Available from: URL: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/
9. Edmond KM, Zandoh C, Quigley MA, Amenga-Etego S, Owusu-Agyei S, Kirkwood BR. Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics*. 2006;117(3):e380-6.
10. Hurley, Walter L., and Peter K. Theil. "Perspectives on Immunoglobulins in Colostrum and Milk." *Nutrients* 3.4 (2011): 442-474. *PMC*. Web. 3 Feb. 2018.
11. Callaghan A, Kendall G, Lock C, Mahony A, Payne J, Verrier L. Association between pacifier use and breastfeeding, sudden infant death syndrome, infection and dental malocclusion. *International journal of evidence-based healthcare*. 2005;3(6):147-67.
12. Khanal V, Adhikari M, Sauer K, Zhao Y, Egata G, Berhane Y, Worku A, Holbrook K, White M, Heyman M. Factors associated with the introduction of prelacteal feeds in Nepal: findings from the Nepal demographic and health survey 2011. *Int Breastfeed J*. 2013;8:9.
13. Girish HO, Abhishek Acharya, Aswin Kumar, Venugopalan PP, Sarada Prabhakaran, Raghavendraswamy Koppad. "Knowledge and practices of breastfeeding among ante-natal mothers at a teaching hospital at Kannur, Kerala: a cross-sectional study". *Journal of Evolution of Medical and Dental Sciences* 2013; Vol. 2, Issue 46, November 18; Page: 8996-9001.
14. Sadhasivam, Muthukumar; Kanagasabapathy, Shankar. Pre lacteal feeding practice among rural mothers in Tamilnadu - A questionnaire based study. *International Journal of Biomedical and Advance Research*, [S.l.], v. 6, n. 6, p. 484-487, June 2015. ISSN 2229-3809.

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