



BREAST FEEDING PRACTICES IN FIRST SIX MONTHS OF AGE IN LOW SOCIOECONOMIC CLASS

Dr Nayana B. S	NICU fellow, Department of Pediatrics, Rangadore Memorial Hospital, Bangalore
Dr Anjali Kalbhande*	Assistant Professor, Department of Pediatrics, ESIC PGIMSR, Andheri (E), Mumbai. *Corresponding Author
Dr Ashwin Meshram	Senior Resident, Department of Pediatrics, ESIC PGIMSR, Andheri (E), Mumbai.
Dr Kailash Patra	Professor and HOD, Department of Pediatrics, ESIC PGIMSR, Andheri (E), Mumbai.

ABSTRACT **Background:** Breast feeding is a natural, feasible, cheap and culturally acceptable nutrition for infants. Lack of knowledge, prevailing misconceptions and cultural taboos in low socioeconomic group significantly contribute to undesirable breastfeeding practices such as delayed initiation and discarding of colostrum. Our study focuses on patterns of breast feeding and factors affecting breast-feeding practices.

Aims and Objectives: To identify feeding practices in mothers. To collect information on variables known or suspected to be associated with breastfeeding initiation. To know the taboos regarding breast feeding. Assessment of awareness about breast feeding in mothers of low socioeconomic strata.

Method: The study was conducted on 400 infants up to 6 months of age in ward or outpatient department a tertiary care hospital in Mumbai over the duration of two years. A questionnaire filled by mothers and face to face interview by a principal researcher for 30 minutes used for data collection which was analyzed using software SPSS version 17.

Discussion: The initiation of breast feeding was strongly associated ($P < 0.001$) with maternal disease, parity of mothers, mother's knowledge, previous history of breastfeeding, type of delivery, taboos regarding breast feeding and inter-delivery interval. And parameters like type of family ($P = 0.028$), birth weight of infants ($p = 0.001$) were found statistically significant with initiation of breast feeding.

Conclusion: Breast feeding in infants in low socioeconomic status is influenced by multiple factors. Study highlights the taboos among mothers obviating an initiation of early breast feeding and calls for educating mothers regarding breastfeeding practices during ANC visits.

KEYWORDS : Breast-feeding, Exclusive, Practices, Taboos

Introduction

Breast feeding is universal way of feeding in newborns and children. Although there are several myths and traditional feeding practices, it is more natural, feasible, cheap and culturally acceptable practice in developing countries. Proper feeding of infants and young children can increase their chances of survival. It can also promote optimal growth and development, especially in the critical window from birth to 2 years of age [1, 2].

Breastfeeding though is a natural act; it is a behavior that needs to be learned. Mothers and other caregivers need active assistance for optimum breastfeeding practices. The Global Strategy for Infant and Young Child Feeding describes the essential interventions to promote, protect, and support exclusive breastfeeding [3].

According to UNICEF optimal breastfeeding of infants has the greatest potential impact on child survival of all preventive interventions, with the potential to prevent over 800,000 deaths; a staggering 13% of all deaths in children under five in the developing world. They also state that exclusively breastfed child is 14 times less likely to die in the first six months than a non-exclusively breastfed child and breastfeeding drastically reduces deaths from acute respiratory infection and diarrhoea which account for majority of under-5 deaths [1].

The National Family Health survey 5 (NFHS-5) data released in India in 2017 has revealed that only 41.6% newborns across the country are given breast milk within the first hour of birth. Only 54.9% of babies are exclusively breastfed in India. The report also states that some health-care workers do not have the time, knowledge or skills to overcome misconceptions about breastfeeding [4].

Early initiation of breastfeeding and exclusive breastfeeding of children below six months are considered the most decisive indicators for assessing breastfeeding practices [5].

In India, breastfeeding is culturally well accepted but inadequately practiced, partly due to ignorance. Lack of knowledge, prevailing misconceptions and cultural taboos significantly contribute to

undesirable breastfeeding practices such as delayed initiation and discarding of colostrum [6].

This study is to find out the patterns of breast-feeding practices, reasons for faulty breast feeding specially in low socioeconomic class, because majority of Indian population belong to the same.

Aims and Objectives

- 1) To identify feeding practices while in hospital and assessment of risk factors associated with delay in initiation of breast feeding.
- 2) To collect information on variables known or suspected to be associated with breastfeeding initiation, including socio-demographic, biomedical and psychosocial factors and hospital practices.
- 3) To know the taboos regarding breast feeding.
- 4) Assessment of proper method of breast feeding and to assess need of early counseling.
- 5) Assessment of awareness about breast feeding in mothers of low socioeconomic strata.

Material and methods

This hospital based observational study was conducted in department of pediatrics of a tertiary care hospital. The present study was conducted over the duration of two years which included infants up to six months of age who were in postnatal ward or pediatric ward or those who came for regular follow up in outpatient department. This study was conducted after receiving approval from institutional ethics committee. A written informed consent was obtained from mothers of infants who were eligible and were willing to enroll in this study. A questionnaire was given to mothers to fill the same and face to face interview was conducted by a principal researcher for 30 minutes which also had the advantage of ensuring that the questionnaire was thoroughly completed. Data from this study was analyzed and reported separately.

The data was recorded in Microsoft excel sheet. The software SPSS version 17 was used for statistical data analysis. Association among parameters was assessed with help of Chi-square test, Pearson chi-square test, and Fisher's exact test. P value less than 0.05 is taken as

significant level.

Results

In the present study, among the study group of 400 infants, the mean age recorded was 2 months, out of which 49.2% were males and 50.8% were females. Out of all mothers under study, 193 (48.2%) belonged to nuclear family and 207 (51.8%) to joint family. In them, 178 (44.5%) were primipara and 222 (55.5%) were multipara, 197 (49.2%) mothers among multipara had inter-delivery interval more than 24 months and 24 (6%) mothers had less than 24 month. Out of 400 infants in study population, 262 (65.5%) were born by normal vaginal delivery and 138 (34.5%) born by caesarean section. Total 293 (73.2%) infants had normal birth weight as per Indian standard and 107 (26.8%) infants had low birth weight. Breastfeeding was initiated within 1 hour after birth in 203 (50.8%) babies. In others, the main reason for delay in initiation of breastfeeding was found to be maternal admission in post-surgery recovery room in 111 (27.8%) mothers followed by decreased milk output 46 (11.4%) mothers and least being baby in ICU in 8 (2%) mothers. Most common taboo precluding breastfeeding was found to be avoidance of breastfeeding during sickness of child 29 (7.0%). Most common problem faced by mothers of infants in the study is anxiety seen in 85 (21.3%) followed by breast engorgement in 79(19.8%) followed by cracked nipple in 20 (5.1%) followed by sick child in 2(0.5%) of mothers.

So, in this study, it was estimated that the initiation of breast feeding was strongly associated (P <0.001) with maternal disease, parity of mothers, mother's knowledge, previous history of breastfeeding, type of delivery, taboos regarding breast feeding and inter-delivery interval. And parameters like type of family (P =0.028), birth weight of infants (p =0.001) were found statistically significant with initiation of breast feeding.

Discussion

The present study was conducted in a tertiary care hospital situated in suburban area of a metropolitan city. This tertiary care institute provides medical services to the population belonging to the lower socioeconomic group. Total of 400 infants were enrolled in this study from 0-6months of age and respective mothers.

Present study showed that out of 193 (48.2%) infants belonging to nuclear family, 45.1% were initiated on breastfeeding within 1 hour of birth and 54.9% were initiated after 1 hour of birth and among 207 (51.8%) infants belonging to joint family, 56% were initiated on breastfeeding within 1 hour of birth and 44% were initiated after 1 hour of life. Similar study conducted by Devang et al showed infants of joint family were initiated breastfeeding within 1 hour (38.7%) and nuclear family infants had breastfeeding initiation rate within 1 hour of life was 33.3% [7]. Rokade et al observed that joint family infants were initiated early breastfeeding (56.4%) than nuclear family infants (43.6%) [8].

In our study, 16.7% mothers had primary education among which 56.7% could initiate breastfeeding within 1 hour of life and 43.3% after 1 hour of life whereas among 82.5% mothers with high school education, 49.7% initiated their babies on breastfeeding within 1 hour of life and 50.3% after 1 hour of life. Among 0.8% mothers who had received higher secondary education, only 33.2% babies were initiated on breastfeeding within 1 hour of life and 66.7% initiated after 1 hour of life. A study conducted by Kafouri et al noted that mothers with high school education with breastfeeding initiation rate within 1 hour of life was 20.9% and more than 1 hour of life was 79% [9].

In this present study, most common taboo associated with breastfeeding was shirking of breastfeeding during sickness of the infant in 7.3% followed by discomfort (3.3%), return to work in 0.5%, loss of figure and embarrassing in 0.3% mothers. In a study by Odom EC et al, 60% mothers stopped breast feeding earlier than desired due to personal concerns such as perceived lactation difficulties, inadequate milk output, their own medical ailments and unsatisfactory infant's weight gain [10]. Janet et al in their study, observed food taboos (37%) as most common taboo regarding breastfeeding [11]. As similar to findings in our study, Tesfayne et al in their study showed that 77.6% multigravida mothers initiated breastfeeding early as compared to 64.5% primi mothers showing significant correlation between parity of mothers and breastfeeding initiation [12]. Rokade et al showed that 75% multigravida mothers initiated early breastfeeding and only 36.1% primi mothers initiated early breastfeeding [8]. Mohite R et al

studied that 60% of the primi gravida mothers under study were well versed with the advantages of breast-feeding practices [13].

Out of 262 (65.5%) mothers in our study who had normal delivery, 72.9% initiated breastfeeding within 1 hour of life and 8.7% mothers who had operative deliveries, initiated breastfeeding within 1 hour of life. Similar study was conducted by Tesfayne et al whose study showed that breastfeeding initiation rate with normal delivery was as high as 72.7% whereas it was 60% with operative delivery correlating with the present study [12].

No study has been done in the past to study the association between birth weight and breastfeeding initiation in infants. Nevertheless, we studied 163(55.6%) infants whose birth weight was more than 2.5kg were initiated on breastfeeding within 1 hour of birth and remaining were initiated after 1 hour of birth whereas 40(37.4%) infants with birth weight less than 2.5kg initiated on breastfeeding within 1 hour of birth and 67(62.6%) were initiated after 1 hour of birth.

A study conducted by Dr.Maumita et al in which 67.7% mothers had satisfactory awareness score about breastfeeding practices and 32.3% had unsatisfactory awareness [14].

Maternal diseases were noted in 39(9.75%) mothers of infants in our study, out of which 37(94.9%) initiated breastfeeding after 1 hour of birth and only 2(5.1%) initiated within 1 hour of birth. A study done by Eman et al also showed that 84.7% mothers who were ill, initiated breastfeeding after 1 hour of life with significant statistical correlation [15].

Conclusion

Breast feeding in infants in low socioeconomic status is influenced by multiple factors including mother's educational qualification, knowledge of breast-feeding practices, obstetric parameters, birth and post-natal events, family environment and taboos about breast feeding prevalent in the society. These factors affect initiation and duration of breast feeding in infants, as it was observed that post-delivery hospitalization of mother or baby and low milk output hinder the initiation of early breast feeding. Moreover, taboos regarding breast feeding need to be addressed through counseling at each antenatal visit. This study highlights the need to educate both mother and family members regarding breastfeeding practices during ANC visits including spouses for support as mother is more receptive during her pregnancy and has good interaction with health care provider.

Tables

Table 1. Demographic profile of cases

Gender of babies	Number of babies	Percentage
Male	197	49.2
Female	203	50.8
Total	400	100

Table 2. Factors significantly associated with initiation of breast feeding

	Initiation of breast feeding after birth			
	Within one hour (n=203, 50.8%)		After one hour (n=197, 49.2%)	
	N	%	N	%
Family Type				
Nuclear	87	45.1	106	54.9
Joint	116	56.0	91	44.0
Maternal disease				
No disease	201	55.1	160	44.3
Disease present	2	5.1	37	94.9
Parity				
Primi	70	39.3	108	60.7
Multi	130	59.9	89	40.1
Mother's knowledge				
Poor	93	45.1	113	54.9
Average	109	59.2	75	40.8
Good	9	90.0	1	10.0
Previous history of breast feeding				
No history	66	37.9	108	62.1
<6 months	14	60.9	9	39.1
>6 months	123	60.6	80	39.4
Type of delivery				
Normal delivery	191	72.9	71	27.1

Operative delivery	12	8.7	126	91.3
Taboos about breast feeding				
No taboo	193	54.5	161	45.5
Taboos present	10	21.7	36	78.3
Inter-delivery interval				
No interval	68	33.5	111	56.3
≤24 months	12	5.9	12	6.1
>24 months	123	60.6	74	37.6

Acknowledgement: we would like to thank Dean ESIC PGIMSR, Andheri (E), Mumbai, for permitting us to submit this manuscript for publication.

REFERENCES

- Infant and Young child Feeding. UNICEF. 2011. https://www.unicef.org/nutrition/files/Final_IYCF_programming_guide_2011.pdf
- Nishimura H, Krupp K, Gowda S, Srinivas V, Arun A, Madhivanan P. Determinants of exclusive breastfeeding in rural South India. *International breastfeeding journal*. 2018 Dec;13(1):40.
- WHO, "Exclusive breastfeeding," 2015, http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/
- National Family Health Survey (NFHS-4), 2015-16. India. Chapter 10.2; 294-296.
- World Health Organization, Indicators for Assessing Infant and Young Child Feeding Practices: Part 1 Definitions, WHO, Geneva, Switzerland, 2008
- Nutrition, Exclusive breast feeding. The World Health Organization's infant feeding recommendation. W H O 2 0 0 8 http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/
- Raval D, Jankar D, Singh M. A study of breast-feeding practices among infants living in slums of Bhavnagar city, Gujarat, India. *Religion*. 2011;2(2):19.
- Rokade HG, Kaware AC, Aggarwal SS: Study of breastfeeding amongst PNC mothers in urban slum areas in Solapur city, Maharashtra: *Scholars Journal of applied medical sciences* 2015;3(6C), 2369-2373.
- Kafouri S, Kramer M, Leonard G, Perron M, Pike B, Richer L, Toro R, Veillette S, Pausova Z, Paus T. Breastfeeding and brain structure in adolescence. *International journal of epidemiology*. 2012 Nov 21;42(1):150-9.
- Odom EC, Li R, Scanlon KS, Perrine CG, Grummer-Strawn L. Reasons for earlier than desired cessation of breastfeeding. *Pediatrics*. 2013;131(3): e726–e732. doi:10.1542/peds.2012-1295
- Danso J. Examining the practice of exclusive breastfeeding among professional working mothers in Kumasi metropolis of Ghana. *International Journal of Nursing*. 2014 Jun;1(1):11-24.
- Setegn T, Gerbaba M, Belachew T. Determinants of timely initiation of breastfeeding among mothers in Goba Woreda, South East Ethiopia: A cross sectional study. *BMC public health*. 2011 Dec;11(1):217.
- Mohite RV, Mohite VR, Kakade SV. Knowledge of breast feeding among primigravida mothers. *Bangladesh Journal of Medical Science*. 2012 Nov 13;11(4):312-6.
- De M, Taraphdar P, Paul S, Halder A. Awareness of breast feeding among mothers attending antenatal OPD of NRS medical college. *IOSR J of Dent and Med Sci*. 2016; 15:3-8.
- Mohammed ES, Ghazawy ER, Hassan EE. Knowledge, attitude, and practices of breastfeeding and weaning among mothers of children up to 2 years old in a rural area in El-Minia governorate, Egypt. *Journal of family medicine and primary care*. 2014 Apr;3(2):136.