

## Original Research Article

DOI: <http://dx.doi.org/10.18203/2349-3291.ijcp20180054>

# A study of breast feeding practices among mothers of infants in an urban slum, South Indian city, Nellore

E. Kishore<sup>1</sup>, Syam Sundar Junapudi<sup>2\*</sup>

<sup>1</sup>Department of Pediatrics, Narayana Medical College, Nellore, Andhra Pradesh, India

<sup>2</sup>Department of Community Medicine, Government Medical College, Nizamabad, Telangana, India

**Received:** 26 December 2017

**Accepted:** 12 January 2018

**\*Correspondence:**

Dr. Syam Sundar Junapudi,

E-mail: doctorshyamj@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

**Background:** The benefits of breastfeeding are well established and for the most part it is rather beneficial for children to drink their mother's milk. One of the most commonly cited benefits of breastfeeding is that it helps connect mothers and their children; the baby feels its mother's body warmth and heartbeat (reminiscent of the womb it has left) and can become familiar with its mother's smell. Studies have shown that babies who are breastfed are more likely to reach adulthood. Breast milk is the ideal food for the infant under any circumstance. Objective of present study was to assess the breast feeding and infant feeding practices among mothers of infants aged 0- 12 months.

**Methods:** A Community based cross-sectional study among mothers of infants aged 0-12 months at field practice area of Narayana Medical College, Nellore. This Study was undertaken during March to May 2016. A sample size of 112 respondents were included in this study.

**Results:** 112 mothers of infants aged 0-12 months were included in this study. The source of knowledge regarding breast feeding among these mothers was health personnel 60 (53.57%), Family members was the second most common source 35 (31.25%) followed by others 17 (15.18%).

**Conclusions:** Family support and mother's literacy play important role in promoting breast feeding among mothers. Health education given to mothers helps them to establish breast feeding and take care of their infants.

**Keywords:** Breast feeding, Infants, Urban

## INTRODUCTION

The role of exclusive breast feeding in fulfilling the basic human rights of the child to attain the highest standards of health are envisaged and affirmed in the Innocenti Declaration of the Protection, Promotion and Support of Breast feeding.<sup>1</sup> The benefits of breastfeeding are well established and for the most part it is rather beneficial for children to drink their mother's milk. Thanks to the history of natural selection, babies are known to instinctively crawl and reach for their mother's breasts if laid on the mother's stomach after birth. One of the most commonly cited benefits of breastfeeding is that it helps connect mothers and their children; the baby feels its

mother's body warmth and heartbeat (reminiscent of the womb it has left) and can become familiar with its mother's smell. Studies have shown that babies who are breastfed are more likely to reach adulthood.<sup>2</sup> There have been more demonstrated benefits due to breastfeeding for the mother (though literature often focuses on the benefits for the child, of which few have been empirically proven). Mothers who breastfeed are less likely to develop certain forms of cancer and diabetes, and it makes post-partum problems and complications less likely and makes part of the post-partum recovery process easier.<sup>3</sup> One long-term study on about 3500 subjects showed on average a significantly higher IQ score (3.76 points) and length of education (almost a year) at the age

of 30 for those who had been breastfed for more than twelve months compared to those with less than one month, whereas confounders have been accounted for. The monthly income showed also higher, though this is attributed mostly to the higher IQ score.<sup>4</sup>

Objective of present study was to assess the breast feeding and infant feeding practices among mothers of infants aged 0-12 months.

## METHODS

A Community based cross-sectional study among mothers of infants aged 0-12 months at field practice area of Narayana medical college, Nellore, Andhra Pradesh, India. This urban health center located at Saraswathi Nagar it covers a population about 30,000. This Study was undertaken during March to May 2016.

A sample size of 112 respondents was calculated by using the formula  $4pq/L^2$  on the basis of pilot study, reporting a prevalence of 47.5% of mothers initiating breast feeding within one hour of birth and 20% allowable error. Purpose of study was explained to mothers and Informed consent was taken from mothers. Ethical clearance was obtained from institutional ethical committee.

### Inclusion criteria

Mothers of infants aged 0-12 months who are attending outpatient services at pediatric ward.

### Exclusion criteria

Who are not giving consent for study.

Data collection was done by using pre-designed, pretested questionnaire.

Data analysis by Using MS office 2010. Statistical test Rates, Ratios, Proportions and Chi-square tests were followed.

## RESULTS

112 mothers of infants aged 0-12 months were included in this study. Majority belonged to 21-25 year age group that is 62 (55.35%) as shown in Table 1.

**Table 1: Age wise distribution of study population.**

Age	Number of mothers, N=112 (%)
15-20	26 (23.21)
21-25	62 (55.35)
26-30	20 (17.85)
>31	4 (3.57)
Total	112 (100)

Majority of study subjects 61 (54.46%) belongs to Hindu religion followed by Muslims 30 (26.78), Christians 20(17.85) and others 1 (0.89) were shown in Table 2.

**Table 2: Religion wise distribution of study subjects.**

Religion	Number of mothers, N=112 (%)
Hindu	61 (54.46)
Muslim	30 (26.78)
Christian	20 (17.85)
Other	1 (0.89)
Total	112 (100)

In this study 62 (55.35%) of the mothers had male child and 50 (44.64%) had female infants as shown in Table 3.

**Table 3: Age and Sex wise distribution of the infants of the study subjects.**

Age in months	Males	Females	Total, N=112 (%)
0-6 months	26 (23.21)	24 (21.42)	50 (44.64)
6 -12 months	36 (32.14)	26 (23.21)	62 (55.36)
Total	62 (55.35)	50 (44.64)	112 (100)

In this study 56 (50%) of the mothers initiated breast feeding within one hour of delivery and 34 (30.34%) within one to four hours and 19 (16.96%) initiated breast feeding after 12 hours as shown in Table 4.

**Table 4: Initiation of breast feeding among the mothers.**

Duration in hours	Number of children N=112(%)
<1 hour	56 (50.00)
1 to 4 hours	34 (30.34)
12 hours or more	19 (16.96)
Total	112 (100)

The source of knowledge regarding breast feeding among these mothers was health personnel i.e. doctor and health worker in 60 (53.57%), family members i.e. near kith and kin was the second most common source 35 (31.25%) followed by others 17 (15.18%) as seen Table 5.

**Table 5: Source of knowledge regarding breast feeding.**

Source of knowledge	Number of mothers, N=112(%)
Family members	35 (31.25)
Doctor and Health worker	60 (53.57)
Others	17 (15.18)
Total	112 (100)

In this study 68 (60.71%) mother's breast fed their infants for about 6-8 times for day, 21 (18.75%) mothers less than 6 times, 20 (17.85%) mothers feed 8 to 12 times for

day. A very small proportion of the mothers 3 (2.67) were administering breastfeeds on demand.

**Table 6: Frequency of breast feeds among the infants of these mothers.**

Number of times in 24 hours	Number of Infants, N=112(%)
<6 times	21 (18.75)
6-8 times	68 (60.71)
8-12 times	20 (17.85)
>12 times, demand feeds	3 (2.67)
Total	112 (100)

## DISCUSSION

In the present study 112 mothers of infants aged 0-12 months were included. Majority belonged to 21-25 year age group. Majority of study subjects 61 (54.46%) belongs to Hindu religion followed by Muslims 30 (26.78), Christians 20 (17.85) and others 1 (0.89) were shown in Table 2. 62 (55.35%) of the mothers had male and 50 (44.64%) had female infants as shown in Table 3. 56 (50%) of the mothers initiated breast feeding within one hour of delivery and 34 (30.34%) within one to four hours and 19 (16.96%) initiated breast feeding after 12 hours as shown in Table 4.

In the present study, out of 112 mothers, 56 (50%) mothers had initiated breast feeding within one hour of delivery, the prevalence of exclusive breast feeding for the first 6 months of life among the infants of the study subjects was 43.05% which shows that it is close to the district and national average. NFHS-3 reported that in Andhra Pradesh, 22.4% of children under 3 years were breastfed within one hour of birth, 62.7% were exclusively breastfed for 6 months and complementary feeds were started at the age of 6 months and they were still being breast fed in 63.7% whereas at the national level, it was 23.4%, 46.3% and 55.8% respectively.<sup>5</sup>

The present finding of exclusive breast feeding is more when compared to the earlier studies Tiwari et al and Roy S et al.<sup>6,7</sup> However, a recent study found that it was 35.2% in an urban slum of Delhi. Complementary feeds were introduced at 6 months by 53mothers in this study which was less than that in other studies Roy S et al In a similar study conducted in an urban slum of Nagpur, 32.56% had started breast feeding within 1 hour after delivery.<sup>7</sup> Colostrum was given by 21.38% mothers. Prelacteal feeds were given by 78.61% mothers. Exclusive breast feeding for 6 months was given by 36.84% mothers. Complementary feeds were introduced at 6 months by 158 (41.11%) mothers.<sup>8</sup>

Roy et al reported that 34.22% of the mothers had been informed about breast feeding by the health personnel while in the present study it was 56.61% and Tiwari et al in their study found that only 3.85% of the mothers had been informed.<sup>9,10</sup> Appropriate feeding during illness is

important to prevent nutritional deficiencies and in the present study, 88.23% continued to breast feed their infants during episodes of diarrhea. Inappropriate infant feeding practices is one of the important causes of malnutrition as has been reported by a study carried out by Ghosh et al.<sup>11</sup>

## CONCLUSION

The present study shows that the breast-feeding practices in the study subjects close to the national averages. The various opportunities for maternal and child health contacts available at the community level and Health facility level must be utilized to reinforce the key messages centering on infant and young child feeding, growth monitoring and promotion. Optimal breastfeeding and complementary feeding practices together allow children to reach their full growth potential. Health education for antenatal mothers regarding breastfeeding gives good results.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

## REFERENCES

1. UNICEF. The Innocenti Declaration on the protection, promotion and support of breastfeeding. Available at <https://www.unicef.org/programme/breastfeeding/innocenti.htm>
2. Gartner LM, Morton J, Lawrence RA, Naylor AJ, O'Hare D, Schanler RJ et al. Breastfeeding and the use of human milk. Pediatrics. 2005 Feb;115(2):496-506.
3. Patelarou E, Girvalaki C, Brokalaki H, Patelarou A, Androulaki Z, Vardavas C. Current evidence on the associations of breastfeeding, infant formula, and cow's milk introduction with type 1 diabetes mellitus: a systematic review. Nutri Rev. 2012 Sep 1;70(9):509-19.
4. Victora CG, Horta BL, De Mola CL, Quevedo L, Pinheiro RT, Gigante DP et al. Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. Lancet Global Health. 2015;3(4):e199-205.
5. National Family Health Survey (NFHS-3), India, International Institute for Population Sciences, Mumbai and ORC Macro; 2005-06.
6. Tiwari R, Mahajan PC, Lahariya C. The determinants of exclusive breast feeding in the urban slums: a community based study. J Trop Pediatr. 2009;55(1):49-54.
7. Roy S, Dasgupta A, Pal B. Feeding practices of children in an urban slum of Kolkata. Indian J Community Med. 2009 Oct; 34(4):362-3.

8. Bagul AS, Supare MS. The infant feeding practices in an urban slum of Nagpur, India. *J Clin Diagn Res.* 2012;6(9):1525-7.
9. National Family Health Survey (NFHS-2), India, 1998-99. Mumbai: International Institute for Population Sciences and ORC Macro; 2000.
10. National Family Health Survey (NFHS-3), India, International Institute for Population Sciences, Mumbai and ORC Macro; 2005-06.
11. Ghosh S, Shah D. Nutritional problems in the urban slums. *Indian Pediatr.* 2004;41:682-96.

**Cite this article as:** Kishore E, Junapudi SS. A study of breast feeding practices among mothers of infants in an urban slum, South Indian city, Nellore. *Int J Contemp Pediatr* 2018;5:320-3.