

## A Cross Sectional Study on Breast Feeding Practices among Infants Aged Upto 6 Months in Rural Population of Jaipur, Rajasthan

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### Abstract

**Background & Objectives:** As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. WHO recommends early initiation of breastfeeding (i.e. within one hour of giving birth). Early breastfeeding within 1 hour and exclusive breastfeeding for first 6 months are the key interventions to achieve reduction in child malnutrition and mortality. The present study was hence conducted to study the prevalence of Breastfeeding practices including time of initiation, giving colostrums, pre lacteal feeds and Exclusive Breastfeeding (EBF) among infants (up to 6 months of age) in rural population.

**Methodology:** A community based cross-sectional study was conducted in rural areas of Achrol village, Jaipur during June 2014 to October 2014. 340 infants were selected for interview but mothers of only 246 infants gave the consent. The study was carried out from door-to-door basis, using semi structured, pre-defined and pre tested questionnaire after taking informed consent.

**Results:** 246 infants upto 6 months were included in this study, among them early initiation of breast feeding (i.e. within 1 hour of birth) was seen in 32(13.0%) of infants. Pre lacteal feed was given in 92.7% of infants, who had received some kind of pre-lacteal feed other than colostrums against the concept of exclusive breast feeding and surprisingly Tea was the commonest (47.81%) followed by honey (26.32%). Colostrums was given in only 83(33.7%) infants. Defying the concept of EBF, majority of the infants i.e.222 (90.2%) were given some kind of top feed even during the first 6 months. Only 24(9.8%) were exclusively breast fed.

**Conclusion:** Early initiation and exclusive breast feeding, giving colostrums and avoiding pre lacteal feeds is not practiced at a desired level; which we would like to promote through the institutions conducting deliveries, by proper counselling of mother during antenatal visits and by educating the health care providers and community.

**Keywords:** Colostrums, Exclusive breast feeding (EBF), Pre lacteal feed.

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### Introduction

Exclusive breastfeeding during the first 6 months of life has been identified as one of the key interventions for reducing childhood deaths according to group of articles published about child survival in LANCET.<sup>1</sup> Optimal infant and young child-feeding (IYCF) practice are crucial for nutritional status, growth, development and health.<sup>2</sup> Breast milk is an important source of energy for infants and it provides immunity to fight against illness and reduce mortality. Exclusive breast feeding for six months is an essential component for growth and development of the infant.<sup>3</sup>

World Health Organisation (WHO) recommends early initiation of breastfeeding (i.e. within one hour of giving birth). Early breastfeeding within 1 hour and exclusive breastfeeding for first 6 months are the key

interventions to achieve reduction in child malnutrition and mortality. WHO proposed a theme on World health day during 2003 as “Healthy environment for children” and 2005 as “Make every mother and child count” to focus the attention of planners, policy makers, administrators, health and social scientists on various problems faced by children.<sup>4</sup>

NFHS-III data shows that initiation of breastfeeding within 1 hour is only 24.5%, while exclusive breastfeeding rates in children <6 months is only 46.4 %.<sup>5</sup>

Breastfeeding is one of the most important determinants of child survival, birth spacing, and prevention of childhood infections. The importance of breastfeeding has been emphasized in various studies. The importance of exclusive breastfeeding and the immunological and nutritional values of breast milk has been demonstrated.<sup>6</sup>

The present study was hence conducted to study the prevalence of Breastfeeding practices including time of initiation, giving colostrums, pre lacteal feeds and Exclusive Breastfeeding (EBF) among infants (up to 6 months of age) in rural population of Jaipur, Rajasthan.

## Material and Methods

A community based cross-sectional study was conducted in rural areas of Achrol village, Jaipur during June 2014 to October 2014. Total population of study area was 16055, and data regarding the total number of infants (less than 6 months) was collected from all anganwadi centres (8) of Achrol village, which came out to be 340.

After taking clearance from the institutional ethical committee and village panchayat, all those infants were selected for interview. The study was carried out from door-to-door basis of all those 340 infants (less than 6 months), using semi structured, pre-defined and pre tested questionnaire, but mothers of only 246 infants gave the consent. To avoid recall bias regarding history of breast feeding practices, we included infants upto 6 months of age. The terms and definitions for Infant and Young Child Feeding Practices were according to National Guidelines on Infant and Young Child Feeding, 2nd edition (2006) and IMNCI.<sup>7</sup> Infants above 6 months and mothers of remaining 94 infants, who did not gave the consent were excluded from the study. Data were entered on MS Excel 2007 and results were analysed on the percentage basis.

## Results

246 infants upto 6 months were included in this study, where majority (52.8%) of them were males. Out of the total subjects, 181(73.6%) were Hindu and 65(26.4%) were Muslim. There was a predominance of Other Backward Caste (41.5%) amongst study infants followed by General Class (26.4%). Scheduled Caste and Scheduled Tribe put together accounted for almost 32%. 104 mothers of study infants (42.3%) were between 25-39 years followed by 97(39.4%) who belonged to the age group of 20-24 years. The findings show that 65 (26.4%) mothers were illiterate.

By occupation housewives (88.6%) dominated the scenario. According to the socio-economic status (according to Modified B.G. Prasad classification, 2013) of their parents, 47 infants (19.1%) belonged to Class I, 34 (13.1%) belonged to Class II, 66 (26.8%) were from Class III, 55 (22.4%) from Class IV and 44 (17.9%) cases belonged to Class V. Table 1 shows that early initiation of breast feeding (i.e. within 1 hour of birth) was seen in 32(13.0%) of infants. Pre lacteal feed was given in 92.7% of infants (Table 2). Table 3 reveals some shocking observations regarding pre-lacteal feeds. 228 infants had received some kind of pre-lacteal feed other than colostrum's against the concept of exclusive breast feeding and surprisingly Tea (the past documented knowledge boasts of Ghutti as the commonest) was the commonest (47.81%) followed by honey (26.32%). Colostrums were given in only 83(33.7%) infants (Table 4).

**Table 1: Distribution of study infants according to time of initiation of breast feeding**

S. N.	Initiation of breast feeding	No. of infants (%)
1	Within 1 hr	32(13.0%)
2	1-6 hrs	120(48.8%)
3	>6 hrs	94(38.2%)
<b>Total</b>		246(100%)

**Table 2: Distribution of study infants according to practice of giving pre-lacteal feeds**

S. N.	Pre-lacteal feeds	No. of infants (%)
1	Yes	228(92.7%)
2	No	18(7.3%)
<b>Total</b>		246(100%)

**Table 3: Distribution according to type of pre-lacteal feed given**

S. N.	Type of pre-lacteal feed	No. of infants (%)
1	Tea	109(47.8%)
2	Curd	36(15.8%)
3	Honey	60(26.3%)
4	Ghutti	19(8.3%)
5	Water	4(1.8%)
<b>Total</b>		228(100%)

**Table 4: Distribution of study infants based on Colostrums feed**

S. N.	Colostrums feed	No. of infants (%)
1	Yes	83(33.7%)
2	No	163(66.3%)
<b>Total</b>		246(100%)

**Table 5: Distribution of Study Infants according to exclusive breast feed**

S. N.	Exclusive breast feed	No. of infants (%)
1	Yes	24(9.8%)
2	No	222(90.2%)
<b>Total</b>		246(100%)

Table 5 shows distribution of Study Infants according to exclusive breast feed. Defying the concept of EBF, majority of the infants i.e. 222 (90.2%) were given some kind of top feed even during the first 6 months. Only 24(9.8%) were exclusively breast fed.

## Discussion

Government of India recommends that initiation of breastfeeding should begin immediately after birth, preferably within one hour.<sup>7</sup> In this study only 13.0% had received breast feeding immediately after birth which is close to the NFHS-3 data of Rajasthan. But in NFHS-3 data of India, breast feeding initiation within 1 hour was 30.3% in urban region.<sup>5</sup>

In a study by Kumar, breastfeeding within 1 hour was only 6.3%.<sup>8</sup> In other study by Chatterjee, 14.54% of newborns were initiated breastfeeding within 1 hour.<sup>9</sup> These differences may be due to the timings when study was conducted, regional differences and sampling techniques.

Ideally nothing should be given to infant up to 6 months of age but due the wrong beliefs and culture, pre lacteal feed is good to the newborn. It is one of the causes for infections in newborn. Here 92.7% of newborns received pre lacteal feed which is higher as compared to NFHS-3 data of Rajasthan, where 74.7% were given pre lacteal feed.<sup>5</sup>

Colostrums is nature's protection of the infant against childhood infections especially during first year of life. Due to the people's wrong belief that it is infectious, they discard the most precious component of the breast milk. Actually every child should receive colostrums but here only 33.7% of infants received colostrums and 66.3% discarded. Similar findings were observed by Devang R, where colostrums were discarded by 63.1% of mother. Different findings were observed in study conducted by Chaterjee, where 96.4% of the infants received colostrums.<sup>9</sup>

Actually an infant should be given exclusively breast milk, up to 6 months of age.<sup>7</sup> In this study, out of 246, only 24 (9.8%) received exclusive breastfeeding. Bela SD, et al showed that 59.1% of baby were exclusively breast fed.<sup>10</sup> Another study conducted by Thakur N showed that 32.5% of baby were exclusively breast fed.<sup>11</sup>

### Conclusion

It is seen in our study that early initiation and exclusive breast feeding, giving colostrums, and avoiding pre lacteal feeds is not practiced at a desired level; which we would like to promote through the institutions conducting deliveries, by proper counselling of mother during antenatal visits and by educating the health care providers and community. In under-resourced settings, breastfeeding education during the antenatal period along with other components of essential newborn care can be delivered through multipurpose health-care workers chosen from the community.

**Conflicts of Interest: None**

**Source of Support: Nil**

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