## **Original Research Article**

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# Study regarding the feeding practice among mothers attending the immunisation clinic of a tertiary care centre

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## **ABSTRACT**

**Background:** The world health organization (WHO) recommends exclusive breast feeding (EBF) for the first six months of life while it is advised to provide adequate and safe complementary foods with breast feeding for up to two years and beyond.

**Methods:** A hospital based cross sectional study was carried out in the immunisation clinic of IGIMS for a period of 6 months from January 2017 to June 2017. A total of 400 mothers were enrolled in the study. Children of Age group 0-12 months were included in the study. Sample size was collected by using convenient sampling from January to June 2017. All mothers who attended our immunization clinic for vaccination of their child and had children less than 12 months of age and who gave verbal consent were included in the study. Mothers were asked to stay after vaccination of their infants to look for any untoward effects of vaccination. Mothers were interviewed by using a semi structured questionnaire after getting a verbal consent from them, All data entry and analyses were carried out using Microsoft Excel and statistical software by descriptive statistics and presented as frequency and percentages.

**Results:** The prevalence of exclusive breast feeding for up to 6 months of age was still low. Male child is having a higher percentage of immunization coverage of about 60%, where as the female child is having about 40%. 36% of the babies were started breastfeeding within one hour and colostrum was given to 40% of them, only 35% of them were on exclusive breast feeding.

**Conclusions:** Use of expressed breast milk was low. The prevalence of EBF for up to 6 months of age was still low as per WHO recommendations. The mother's perception of "insufficient breast milk" was also the main reason for introducing other foods. We should make a strategy by making a guideline for promoting and educating about exclusive breastfeeding within the existing health care system such as the antenatal, after delivery and vaccination clinics.

Keywords: Exclusive breast feeding, WHO, Immunization, Government of India, diarrhea and respiratory infection

## INTRODUCTION

Breast feeding is natural physiological and ideal way of feeding the infants. Exclusive breastfeeding for the first six months of life and timely introduction of weaning foods are important for laying down proper foundations of growth in later childhood. Breast milk protects the infant against infectious and chronic diseases. Exclusive

breastfeeding for 6 months is the optimal way of feeding infants.<sup>2</sup> The world health organization (WHO) recommends exclusive breast feeding (EBF) for the first six months of life while it is advised to provide adequate and safe complementary foods with breast feeding for up to two years and beyond. Exclusive breastfeeding, which giving breast milk only and no other liquids, except drops or syrups with vitamins, mineral supplements or

medicines, is superior to non-exclusive breastfeeding with a protective effect against both morbidity and mortality Exclusive breast-feeding provides low cost, complete nutrition for the infant, protects him/ her against infections including infant diarrhea, and prolongs lactational amenorrhea, thereby increasing birth spacing. Breastfeeding, the simplest, healthiest and least expensive feeding method that fulfills the infant's needs for nutrition and growth and it also reduces child morbidity and mortality. <sup>4</sup> As a global goal for optimal maternal and child health and nutrition, all women should be enabled to practice exclusive breastfeeding, and all infants should be fed exclusively on breast milk, from birth to 6 month of age.5

Non-breast fed baby is 15 times more likely to get diarrhea and is three times more likely to get respiratory infection. Practice of exclusive breast feeding has dramatically reduced infant mortality in developing countries due to reduction in diarrhea & infectious diseases.1

Breast milk reduces the risk of a number of acute and chronic diseases especially the diarrheal diseases and respiratory tract infections in early childhood as well as has long-term benefits for cardiovascular health and hence reduces childhood mortality. The Government of India has always been promoting at the National and International level, the importance of exclusive breastfeeding for the first six months of an infant and the introduction of complementary foods thereafter with continued breastfeeding up to two years which is consistent with the Indian tradition.<sup>2</sup>

For child survival mother's milk is one of the most important determinants besides breast feeding helps in inter birth spacing and prevention of childhood infections. Breast milk provides nutritive immunological protection in infants to ensure health and survival. It is known to prevent adult onset disease like coronary artery disease, diabetes and hypertension. According to a published survey, a major barrier for successful in hospital breast-feeding is inconsistency in information and nursery practices related to breastfeeding management.

## **Objective**

To assess the feeding practices among mothers with children less than twelve months of age attending the immunization clinic of a tertiary care centre.

## **METHODS**

A hospital based cross sectional study was carried out in the immunisation clinic of IGIMS for a period of 6 months, from January 2017 to June 2017. A total of 400 mothers were enrolled in the study. The study subjects were lactating mothers having children less then 12 months of age, who were attending our immunization clinic for routine immunisation. Sample size was

collected by using convenient sampling from January to June 2017. Mothers were asked to stay after vaccination of their infants to look for any untoward effects of vaccination. Mothers were interviewed by using a semistructured questionnaire after getting a verbal consent from them. Information of mothers regarding their demographics, knowledge and practice towards breastfeeding was collected on a pre-designed and pretested proforma. Mothers were asked in Hindi and response was noted on the pre-designed pro forma. Mothers were asked about their age (in nearest years), age at marriage, and their educational status. They were also asked about the place of delivery, weaning, prelacteal feed, and period of exclusive breastfeeding. Any doubt among mothers was cleared at the end of the interview.

#### Inclusion criteria

Inclusion criteria were all mothers with children less than 12 months of age attending the immunization clinic of a tertiary care centre from January to June 2017 and all mothers who actively participated in the study by giving verbal consent.

#### Exclusion criteria

All those who showed non-cooperative attitude or un willingness for participation in the study.

## Statistical analysis

It was done by descriptive statistics and presented as frequency and percentages

## **RESULTS**

Table 1: Biological characteristic of infant.

Variable	Frequency	Percentage (%)		
Sex				
Male	240	60		
Female	160	40		
Age of child (in months)				
<6	180	45		
>6	220	55		

According to Table 1 the male child is having a higher percent of immunization coverage of about 60%, where as the female child is about 40%.

According to Table 2, about 70% of mother belong to age group 19-29, about 55% of the mother were of hindu religion. The higher percentage (75%) of the mothers were of nuclear family. About 50% of them were graduate, 65% of them were of para 1-2.

According to Table 3 about 36% of the babies were started breastfeeding within one hour and colostrum was given to 40% of them, prelacteal feed was given to 55%

of them, only 35% of them were on exclusive breast feeding.

Table 2: Socio-demographic profile of mothers.

Demographic factors	n=400	Percentage (%)		
1. Age of mother (in years)				
19- 29	280	70		
30-40	120	30		
2. Religion				
Hindu	220	55		
Muslim	180	45		
3. Type of family				
Nuclear	300	75		
Joint	100	25		
4.Literacy status				
Illeterate	20	5		
High school	60	15		
Intermediate	120	30		
Graduate	200	50		
5. Mode of delivery				
Normal	160	40		
Cessarian section	240	60		
6. Parity				
Para 1-2	260	65		
Para 2-4	80	20		
Para > 4	60	15		

Table 3: Information related to feeding (child).

Variable	No	Percentage (%)		
1. Breast feeding was started				
Within 1 hour	144	36		
After 1 hour	256	64		
2. Colostrum was given				
Yes	160	40		
No	240	60		
3. Prelacteal feed was given				
Yes	220	55		
No	180	45		
4. Exclusive breast feeding was seen				
Yes	140	35		
No	260	65		

## **DISCUSSION**

The prevalence of exclusive breast feeding (EBF) for up to 6 months of age was still low. The mother's perception of "insufficient breast milk" was also the main reason for introducing other foods. We should make a strategy by making a guideline for promoting and educating about exclusive breastfeeding within the existing health care system such as the antenatal, after delivery and vaccination clinics. Undesirable cultural practices such as giving prelacteal feeds, late initiation of breastfeeding after birth, delay in introduction of weaning foods and avoiding exclusive breastfeeding are still prevalent among the mothers. There is a need to Carry out more

training and awareness campaigns to maintain the high rate of EBF. A house-to-house surveys should be Conducted to establish more in-depth understanding on the practices and knowledge of EBF. Training must be given to advocate the use of expressed breast milk.<sup>6</sup>

In our study the male child is having a higher percent of about 60%, which is concomitant to the finding of study done by Maitietal where also the male child is having a higher percentage (52.80%) of vaccination coverage than the female child.<sup>4</sup> In our study about 70% of the female were of age group 19-29, which is almost similar (66.9%) to the study done by Alamirew et al in ethiopia where as study the done by Singh et al majority of the mothers were in the age group of 20-24 years (37.5%).<sup>2,7</sup> In our study majority (55%) of the mother were of Hindu religion, which is concomitant to the finding of Singh et al, were about 93% of them were belonging to Hindu religion<sup>2</sup>. In our study a higher percentage (75%) of the mothers were of nuclear family, were as study done by Singh et al shows a higher percentage of mothers were of joint family (57%), which is different from our study.<sup>2</sup>

In our study, about 50% of the mothers were graduate where as in the study done by singhetal only 7.50% of the mothers were graduate, which is very less than our study<sup>2</sup>. In our study about 65% of the mothers were of para 1-2, where as Warillea et al had a finding of about 55.5% of the mothers belonging to para 2-4, which is not similar to our study<sup>6</sup>.

In our study colostrum was given to 40% of the baby were as study done by Maitietal about 74.83% of the baby were given colostrum where as study done by Alamu et al the colostrum was given to about 94.5% of the baby. 4,9 In our study prelacteal feed was given to 55% of them were as study done by Divyarani DC et al 57.6% of them were given prelacteal feed, which is almost similar to our study, where as study done by Khan in delhi showed that prelacteal feed was given to 38% of the child. 1,10 Our study only 35% of them were on exclusive breast feeding were as study done by Maitietal showed that about 60.84% of the baby were on exclusive breast feed which is more than our study.<sup>4</sup> These differences may be due to the timings when study was conducted, regional differences, place of delivery, and also the mother's knowledge on breastfeeding was less.

#### **CONCLUSION**

The prevalence of breastfeeding for up to 6 months of age was low. The mother's perception of "insufficient breast milk" was also the main reason for introducing other foods. The world health organization (WHO) recommends EBF for the first six months of life while it is advised to provide adequate and safe complementary foods with breast feeding for up to two years and beyond. EBF remains uncommon in most countries (both developed and developing), even in countries with high rates of breast feeding initiation EBF for the first six

months of life is now considered as a global public heath goal that is linked to reduction of infant morbidity and mortality, especially in the developing world. One of the gravest problems India is confronting with is malnutrition among under-5 children. As in other developing nations, malnourishment is a burden on considerable percentage of population, the most vulnerable being the youngest group of the society. Breast feeding, which includes the components of breast milk, suckling, skin to skin contact and holding.

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Institutional Ethics Committee

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