

# Breastfeeding and Weaning Practices Among Mothers Coming to Primary Health Care Center: An Experience From Rural Bihar

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## Abstract

**Background:** Breastfeeding is an ideal form of infant feeding. Breastfeeding and weaning are not properly practiced by many mothers in all corners of the country. There are a number of factors that influence breastfeeding and weaning practices.

**Aim:** The aim of this study was to find out the pattern of breastfeeding and weaning practices among mothers in this part of the country.

**Materials and Methods:** It was a cross-sectional study conducted at Primary Health Care Center, a Rural Health Training Center of Indira Gandhi Institute of Medical Sciences. Mothers coming for measles immunization were enrolled in the study. Interviews were conducted with semi-structured questionnaire.

**Result:** A total of 160 mothers were enrolled in the study. More than half of them (63%) were in the age group of 20–25 years and less than a quarter were illiterate. Almost all mothers (92%) started breastfeeding same day after delivery but only one-third fed colostrums to their newborn. A good number of mothers (73%) started weaning before 6 months.

**Conclusion:** Emphasis on importance of colostrum and exclusive breastfeeding need to be dispensed at the time of interaction with health-care delivery personnel.

**Key words:** Breastfeeding, Prolactal feed, Weaning

## INTRODUCTION

Breastfeeding is an ideal form of infant feeding and is crucial for lifelong health and well-being. It provides unique nutritional, immunological, psychological, and child spacing benefits apart from being cost effective. It has been established that breastfeeding has short-term benefits particularly the reduction of morbidity and mortality due to infectious diseases in childhood. Studies carried

out in middle- and low-income countries showed that breast feeding substantially lowers the risk of death from infectious diseases in the first 2 years of life.<sup>[1]</sup> Breastfeeding continues to be the norm in low-income countries, but the period of exclusive breastfeeding after birth is variable. The World Health Organization (WHO) recommends that breastfeeding must be done for the first 6 months of life.<sup>[1]</sup> The United Nations Children's Fund has estimated that exclusive breastfeeding in the first 6 months of life can reduce under-five mortality rates in developing countries by 13%.<sup>[2]</sup> Gain in terms of incidence and prevalence of maternal breastfeeding has not been as great as is to be desired even after efforts on promotion of maternal breastfeeding.<sup>[3]</sup> There are a number of factors that influence the breastfeeding practices such as motivation, mother's education, family support, and cultural practices. These factors may influence the practices of weaning

Access this article online



www.ijss-sn.com

Month of Submission : 01-2018

Month of Peer Review : 02-2018

Month of Acceptance : 02-2018

Month of Publishing : 03-2018

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process and lead to early start of supplementary foods to their infants. It has been found that in India; only 58% of the infants are exclusively breastfed between 0–4 months.<sup>[4]</sup>

Infant mortality is high in many states. Breastfeeding is almost universal, but studies have shown a decline in breastfeeding trends, especially in urban areas in our country.<sup>[5]</sup> The information about breastfeeding and weaning practices in rural Bihar is scarce. The present study was conducted with the objective to find out the pattern of breastfeeding and weaning practices among mothers from one of the Primary Health Care Centers (PHCs) of Bihar.

## MATERIALS AND METHODS

The present cross-sectional study was conducted at one of the PHCs that has been allocated as Rural Health Training Center of Indira Gandhi Institute of Medical Sciences. The PHC caters around 2 lakhs population with facilities such as antenatal care checkup, immunization, delivery, and regular OPDs. Routine immunization is done for infants and children as well as women on schedule dates. The present study was conducted using convenient sampling from February to March 2014 for 2 months. All mothers visiting for measles vaccination of their child/children on Tuesdays and Thursdays were enrolled in the study. Mothers were asked to stay after vaccination of their infants to look for any untoward effects of vaccination. Mothers were interviewed at this time using a semi-structured questionnaire after getting a verbal consent from them. Those mothers who were not willing to participate and/or who did not give their consent for the said purpose were excluded from the study. The questionnaire included demographic profile, details on breastfeeding and weaning practices, and place of delivery. Mothers were asked in Hindi and response 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. At the end of the interview, any doubt among mothers was cleared by the interviewer.

### Statistical Analysis

Descriptive statistics were used and presented as frequency and percentages.

## RESULT

There were a total of 160 mothers that were enrolled for the study. Out of the total mothers, 63% were in the age group of 20–25 years and around one-third (28%) in <20 years age group. Only 9% were in the age group of >26–30 years

**Table 1: Demographic profile of mothers**

Demographic profile	Number (%)
Mothers age	
<20	45 (28)
21–25	101 (63)
26–30	14 (9)
Total	160 (100)
Age of marriage	
<20	77 (48)
21–25	78 (49)
>25	5 (3)
Total	160 (100)
Literacy status	
Illiterate	37 (23)
Primary	101 (63)
Secondary and above	22 (14)
Total	160 (100)
Place of delivery	
Hospital	66 (41)
Home	94 (59)
Total	160 (100)

**Table 2: Distribution according to feeding and weaning practices**

Variables	Number (%)
Breastfeeding started	
Same day	147 (92)
Within 1 h	37 (23)
After 1 h	110 (77)
Total	147# (100)
Colostrum	
Given	59 (37)
Discarded	101 (63)
Total	160 (100)
Weaning	
<6 months	117 (73)
6–12 months	43 (27)
Total	160 (100)
Prelacteal feed (n=30)	
Honey	10 (33)
Cow milk	12 (40)
Sugar water	6 (20)
Others	2 (7)
Total	30 (100)
Exclusive breastfeeding	
0–4 months	125 (78)
4–6 months	27 (17)
>6 months	8 (5)
Total	160 (100)

#13 mothers did not breastfed on the same day

and less than a quarter (23%) were illiterate. Half (48%) of them got married in <20 years and the rest after that [Table 1]. It has been seen that almost all mothers (98%) started breastfeeding same day after delivery and one-quarter (23%) within 1 h. Rest of the mothers did not start breastfeeding same day because they delivered their babies by caesarian section. More than half (59%) of deliveries were conducted at home. More than three-quarter (78%) of the mothers did exclusive breastfeeding up to 4 months

of age. 73% mothers started weaning before 6 months of age since they could not produce enough milk for their child. Cow milk was the commonest prelacteal feed for infants [Table 2].

## DISCUSSION

The WHO recommends that breastfeeding should be started within 1 h of birth. For the promotion of early action on breastfeeding, baby-friendly hospital initiative has been designed so that mother can start breastfeeding as early as possible.<sup>[6]</sup> The present study revealed that 63% of the subjects were in the age group of 20–25 years. One-fifth were illiterate (23%) and half (48%) of the subjects married before the age of 20 years. 59% deliveries conducted at home and 78% mothers breastfed their infants up to 4 months of age. Three-quarter (73%) subjects started weaning before 6 months of age. 23% of newborns were breastfed within 1 h of delivery. It has been observed in study by Chandrashekhar *et al.* in rural Karnataka and Bhatt *et al.* at tertiary health care of Vadodara that there is lower percentages of breastfeeding initiation within 1 h of delivery,<sup>[7,8]</sup> but there is also evidence of the higher rate of breastfeeding within 1 h by Madhu *et al.*<sup>[9]</sup> There is a lot of difference in cultural beliefs and practices in different regions of this country that may lead to difference in practices of breastfeeding.

Colostrum as the first feed to newborn is a rich source of minerals, vitamins, and immunoglobulin.<sup>[10]</sup> Prelacteal feed should be avoided as much as possible but it had been seen that there were number of mothers (19%) who gave prelacteal feed to their newborns. It has been observed by Raut *et al.* in Vidarbha region of Maharashtra and Khan *et al.* in the peripheral area of Aligarh that there is a large difference in prelacteal feeding practices.<sup>[11,12]</sup> It is now established that exclusive breastfeeding should be continued for first 6 months of a child's life to reduce the chances of malnutrition and infection. Exclusive breastfeeding helps in the development of infants as the mother's milk is suitable for the infants and children. We observed that 52% of women were doing exclusive breastfeeding for first 4 months that are similar to the observations found by Benjamin *et al.*<sup>[13]</sup> in Punjab. Premature initiation of weaning may have a long-term effect on the physical growth of the child that has been observed by Hop *et al.* in Vietnamese children.<sup>[14]</sup> Mothers elaborate different reasons for the early initiation of weaning, the most common reason being insufficient milk. Hop *et al.* also showed that less than one-fifth mothers continued exclusive breastfeeding for first 6 months.<sup>[14]</sup> Contrary to this, there have been studies which have shown that number of mothers exclusively breastfed their newborn, depending on the education of

mothers, place of delivery, and other factors.<sup>[14,15]</sup> Sharma *et al.* found that decision of mother-in-law plays a major role in child care including exclusive breastfeeding and weaning and colostrum feeds in rural India.<sup>[16]</sup> The same is true for the present study too.

## Limitations

Sample size may be a limitation as the study was conducted only for 2 months. There are other health facilities including private practitioners available in that area. Hence, all mothers might not have utilized the services of Primary health care centre, and hence, were not included in the study. Mothers, who did not come for vaccination of their infants, were consequently not enrolled and are other limitations of this study.

## CONCLUSION

There is a need to emphasize the importance of colostrums, exclusive breastfeeding among mothers of rural areas. It is also important to convince mothers and other valuable person of family regarding the proper weaning process for proper development of infant and child at the same time intervention in customs and belief in the community as whole is also important.

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**How to cite this article:** Sinha S, Singh V, Kumar S, Choudhary SK, Sinha S, Kumar B. Breastfeeding and Weaning Practices Among Mothers Coming to Primary Health Care Center: An Experience From Rural Bihar. *Int J Sci Stud* 2018;5(12):92-95

**Source of Support:** Nil, **Conflict of Interest:** None declared.