

A descriptive cross-sectional study of breast-feeding practice in Bikaner, Rajasthan

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Abstract

Background: Breast-feeding practices play an important role in reducing the child mortality and morbidity. This study describes the breast-feeding practices in Bikaner, Rajasthan, India.

Objective: To study the breast-feeding practices and factors affecting initiation and duration of breast-feeding.

Materials and Methods: This cross-sectional study was conducted at the immunization center of Sardar Patel Medical College, Bikaner, Rajasthan from June 2015 to October 2015 for the period of 4 months. Mothers who came to the immunization center for vaccination with infants aged less than 1 year were included in the study. A total of 600 mothers were included in this study.

Result: Our study showed that most of the mothers initiated breast-feeding (98%) and the others (2%) were not able to initiate and only 38% of the mothers did the exclusive breast-feeding until 6 months and started weaning after 6 months. A total of 57% of mothers in our study prematurely started weaning.

Conclusion: This study emphasizes the need for breast-feeding intervention programs especially for the mothers during their antenatal and postnatal checkups. The information regarding the advantage and duration of breast-feeding needs to be provided for the community as a whole.

KEY WORDS: Breast-feeding, weaning, infants, mothers, immunization

Introduction

Extensive research in various countries has provided evidence that breast-feeding clearly has health benefits for infants as well as mother.

United Nations International Children's Emergency Fund and World Health Organization recommended that children should be exclusively breast-fed during the first 6 months of life. Breast milk is uncontaminated and contains all the nutrients necessary for the children in the first few months of life.

The first breast milk is known as colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases.

Many infants, in addition to breast milk, are given something else from an early age, such as water, tea, or milk. These other foods can lead to malnutrition because of inadequate nutritional content and intolerance, which increases infant's morbidity and mortality rates.

Breast-feeding is one of the most important determinants of child survival, birth spacing, and prevention of childhood infections. The importance of breast-feeding has been emphasized in various studies.^[1,2] The importance of immunological and nutritional value of breast milk has been demonstrated in other studies.^[3,4]

The beneficial effects of breast-feeding depend on breast-feeding initiation and its duration.^[5] Breast-feeding practices vary among different regions and communities in India, breast-feeding practices in rural areas appear to be shaped by the belief of a community, which are further influenced by social, cultural, and economic factors.

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Materials and Methods

This cross-sectional study was conducted at the immunization center of Sardar Patel Medical College, Bikaner, Rajasthan, India from June 2015 to October 2015 for the period of 4 months. Mothers who came to the immunization center for vaccination with infants aged less than 1 year were included in the study. A total of 600 mothers were included in this study. Verbal consent was obtained. Those who were not willing to participate were excluded.

The pretested questionnaire included various factors that had a potential effect on the initiation and duration of breast-feeding practice. The questionnaire included socio-economical and sociodemographical data and details on the initiation and duration of breast-feeding. A pretest run was done to validate the questionnaire. For socioeconomic status, a standard of living index^[6] was used that can be used for both urban and rural backgrounds.

Statistical Analysis

Data analysis was done according to the descriptive statistics. Results were given in percentages.

Result

Total 600 mothers participated in our study. Percentage distribution of study population by socio demographic characteristic showed that the majority of the mothers were between the ages of 21 and 25 years (53%). About 40% of mothers were illiterate. 48% belonged to low socio-economic class. Majority of mothers were housewives (88%) and remaining 12% of mothers were employed in various occupation.

Initiation of Breast-Feeding

Most of the mothers had breast fed (98%) whereas 2% were not able to breastfed (separation of child from mother or due to advice from the mother-in-law).

In our study 31% mothers initiated breastfeeding within 30 minutes of delivery and 48% initiated breastfeeding after a delay of 2 to 3 hours.

A total of 19% of the mothers in our study did not breast feed even after 24 hour of the delivery. These babies were given pre lacteal feed and colostrum was discarded by the mother. Sugar water, honey and ghee were commonly used pre lacteal feed.

Only 38% of the mothers did the exclusive breast-feeding until 6 months and started weaning after 6 months. A total of 57% of the mothers in our study prematurely started weaning.

Only 38% of the mothers did the exclusive breastfeeding until 6 months and started weaning after 6 months. A total 57% of mothers in our study prematurely started weaning.

5% mothers continued exclusive breastfeeding even at 9 months.

A total of 76% of the mothers followed on demand feeding practice.

Cow milk (29%) was most common food used for infants who were breastfed less than 6 months, followed by mix of milk and water. Only 16% mothers used commercial infants formula.

Among the mothers who started weaning after exclusive breastfeeding their child for 6 months, cow milk was most common weaning food (36%).

Discussion

Women have a very positive attitude toward the initiation of breast-feeding. In this study, almost all the women had initiated breast-feeding and continued to breast-feed beyond 6 months. Benakappa et al.^[7] and Chandrashekar et al.^[8] also showed similar pattern.

Breast milk should be initiated within half hour of delivery.^[9] The delay in initiation will lead to a delay in the development of oxytocin reflexes, which are very important for the contraction of the uterus and the breast milk reflex. In our study, it was observed that the initiation of breast-feeding was done within 30 min of childbirth, which is a good practice.

Prelacteal feeds should not be given but still the majority of mothers gave either sugar water or honey. Discarding the colostrum is still practiced widely. The colostrum is rich in vitamins, minerals, and immunoglobulin, which protects the child from infections.^[10] Discarding the colostrum and feeding the child with honey or sugar water makes the child vulnerable to infections. Sharma and Kanani^[11] have also found similar practices in the community and it is largely influenced by the relatives and the primary care providers during childbirth.

Exclusive breast-feeding should be continued for 6 months.^[12] It protects the child from malnutrition, infection, and helps the overall development of child. Prematurely weaning the child may lead to development of infection and may have a long-term effect on the physical growth of the child.^[13] The main reason given by the mothers to start early weaning was insufficient milk, which may be due to their early marriage (those who were younger than 19 years old) and early child birth. Studies indicate that adolescents breast-feed less often than adults and they hold positive and negative attitude toward breast-feeding, which influence decision making and breast-feeding.^[14]

Most of the mothers received information regarding breast-feeding from health workers and doctors. The development of counseling skills among doctors helps in conveying the right message to mothers about breast-feeding and weaning practices.^[15]

The influence of the mother-in-law and self assumption about lack of milk for the baby are cited as the major reasons for early and late weaning.

Limitations

The limitation of our study is sampling bias. Relatively small sample size cannot be extrapolated to the whole population.

Table 1: Sociodemographic profile

	Groups	Number	Percentage (%)
Age of mothers	<21 Years	150	25
	21–25 Years	318	53
	26–30 Years	78	13
	>30 Years	54	09
Formal education	None	228	38
	Primary to secondary	282	47
	College	90	15
Employment	Working	72	12
	Not working	528	88
Socioeconomic status	Low	288	38
	Medium	264	44
	High	48	08
Parity	One	228	38
	Two	264	44
	Three	72	12
	More than three	36	6

Table 2: Duration of breast-feeding

Duration	Number	Percentage (%)
<6 Months	342	57
>6 Months and started weaning	228	38
>6 Months and not yet started weaning	30	5

Conclusion

This study emphasizes the need for breast-feeding intervention programs especially for the mothers during their antenatal and postnatal checkups. The information regarding the advantage and duration of breast-feeding needs to be provided for the community as a whole. Practices such as discarding the colostrum and early or late weaning should be discouraged and community-based health education programs need to be conducted.

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