

Newborn Feeding Practices in India: A Review



Nursing

KEYWORDS : Breast feeding, Colostrums, Newborn, Prolactal feeds, Traditional practices

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ABSTRACT

Newborn feeding practices constitute a critical determinant in infant growth and development. In India, these practices are influenced by traditions and beliefs. A review of 21 published articles was conducted to retrieve information on traditional beliefs and practices in newborn feeding. Breastfeeding, feeding colostrums and prelacteal feeds were considered for analysis. The common beliefs for delayed initiation of breastfeeding were that it was insufficient and not ready to be fed. The reasons for discarding colostrums were that it was impure or heavy to digest. Prelacteal feeds given were boiled water, sugar water, honey, mustard oil, tea, goat or cow's milk, jaggery and ghee. These practices were present in different parts of India. This review necessitates the need to explore the local beliefs and practices which could compliment the knowledge of healthcare providers to deliver an effective newborn care.

INTRODUCTION

Newborn period is a crucial period of survival during infancy. Utmost attention is needed during this period with respect to nutrition. Proper breast feeding is essential for the physical and mental development of an infant (UNICEF,2009). Nevertheless, practices related to breastfeeding, colostrums, and prelacteal feeds are strongly influenced by knowledge and beliefs of mothers, their cultural and social circumstances (Roy,2009).

From ancient times, infant feeding practices had been a prime concern in our country. While the value of early breastfeeding had been stressed in Charaka Samhita, Sushruta Samhita had recommended colostrums to be replaced with prelacteal feeds. Irrespective of the outcomes on newborn health, feeding related traditional beliefs and practices are being upheld and passed from generation to generation with variations among the Indian communities (Sabharwal, 2014). Such traditional beliefs and feeding practices influence the newborns' nutritional status and thereby the overall health of infants (Wadde, 2011). Knowledge about these beliefs and practices is vital for health care providers especially the nurses to tailor their skills to provide effective newborn care. In this context, a review of published studies was conducted to analyze the traditional beliefs and practices encompassing newborn feeding in various parts of India.

Objectives

1. To identify the newborn feeding practices prevailing in different parts of India.
2. To discuss the potentially beneficial and harmful effects of these practices on the health of the newborn.

METHODOLOGY

Based on the objectives, the focus of the study was examined in Pubmed and Google Scholar databases. The objectives, methodology, results and discussion of studies conducted between 2009 and 2015, which discussed the newborn feeding practices in India, were reviewed. In the first phase, the studies were identified using the keywords such as breastfeeding, colostrums, newborn, traditional practices etc. and relevant studies available as full texts were included. In the second phase, the feeding practices like initiation of breast feeding, prelacteal feed given, colostrums fed and discarded were analyzed. In the third phase, the information obtained from these studies was utilized in the discussion part of the study.

RESULTS

A total of 46 studies were identified using the search terms. 25 studies were excluded due to incomplete information. Out of the 21 cross sectional studies finally selected, 14 studies were community based – urban (4), rural (8) and tribal (2). Seven studies were hospital based. These studies had been conducted in various parts of India. The findings pertinent to the study objectives are reported in Table1a,1b and 1c.

Prelacteal feeding had been documented in 20 studies. While, a highest practice (92%) of prelacteal feeding was observed in the study by Kestertnona et al. (2009) in rural Bangalore, it was very less (5.9%) in rural Puducherry (Vijayalakshmi et al., 2014).

All the studies had documented breastfeeding practices. Mahmood et al. (2012), Wagh et al.(2013) & Paudel et al.(2014) had observed a practice of >70% in breastfeeding within 30 minutes. The UNICEF (2009) All India survey had reported that one third of mothers had breastfed their newborn within half an hour and 57% mothers had breastfed within two hours after delivery. Sixteen studies had documented a practice of breastfeeding after 24 hours with prevalence varying between 1.9% and 52.7%.

Feeding or discarding Colostrums had been reported in 17 studies. Although the All India survey (UNICEF, 2009) had recorded a feeding practice of 85%, it varied from 35% (Yadavannavar et al., 2011) to 98% (Vijayalakshmi et al., 2014 & Paudel et al., 2014).

DISCUSSION

Cultural and traditional beliefs have considerable implications on newborn feeding. The differences observed in the proportions of traditional feeding practices in the studies reviewed could be due to different settings and regions where the studies had been conducted.

Prelacteal feeds are given to a newborn before breast feeding is established or usually on the first day of life. Boiled or unboiled water, sugar water, honey, mustard oil, tea, goat or cow's milk, jaggery, ghee, castor oil, ghutti (honey with nutmeg), candy water etc.

are the commonly given feeds. These items are given to a newborn with a belief to 'clean the digestive system as the fetus swallows waste and impurities in the womb'. Another belief is that the child will take care of the person who gives the prelacteal feed, in future (Shaili et al., 2012). Various methods are used in offering the prelacteal feeds. Either an unsterilised spoon or cotton rag or rubber teat or finger is used to feed. These unhygienic measures may expose the newborn to diarrheal infection (Giridhar, & Lakshmi, 2012). They could also delay the onset of lactation, sensitize the gut to foreign proteins or introduce infection (Shwetal et al., 2012).

NFHS 3 states that about 60% of babies receive prelacteal feeds and the practice varies considerably among the urban, rural and tribal communities in all states of India. (Grover & Chhabra, 2012; Shaili et al., 2012). A similar observation was noted in the studies reviewed. To bring about a substantial change in the wrong beliefs and practices, behavioral change communication strategy needs to be developed.

Feeding of breast milk is a fundamental right of a child (Madhu, Chowdary, & Masthi, 2009). It is invaluable for infant survival in the developing world particularly among the lower socio economic and disadvantaged groups (Bobhate & Shrivastava, 2012). However, the beneficial effects of breast feeding depend on factors such as initiation, duration and the age at which the breastfed child is weaned. UNICEF (as cited by Giridhar, 2012) recommends breast feeding to be initiated within half-hour of birth. Although there is little milk at that time, it helps to establish feeding and bonding between the mother and baby

The reasons for delay in initiation of breastfeeding recorded in the studies reviewed were 'it is harmful', 'mother has insufficient milk', and 'mother's milk is not ready until two to three days postpartum'. It is noteworthy that breastfeeding is delayed even upto 24 hours in many parts of India. A delay in breastfeeding adversely affects the quantity of breast milk produced. In addition, the delay in stimulation normally provided by suckling, could lead to hypoglycaemia, hypothermia and acidosis, especially among the high risk, low birth weight newborns ending in mortality (Ahmad et al., 2012). The good practice of early initiation of breastfeeding in certain places noted in the review could be due to high level of female literacy, effective antenatal and postnatal services by healthcare providers.

The reasons stated for discarding colostrums were 'as per elder's advice', beliefs that 'colostrums is not good, impure, heavy to digest' or 'causes diarrhea'. Mothers have to be made aware of the fact that it is easily digestible, provides a concentrated energy and protein to the newborn, and protects the baby against respiratory and diarrheal infection (Vijayalakshmi et al., 2014).

CONCLUSION

The current review of literature indicates that traditional feeding practices are still prevailing in various parts of India. Nurses and other healthcare providers should be aware of the existing beneficial and harmful local traditional newborn feeding practices and provide appropriate health education to antenatal and postnatal mothers about the impact of these practices on health of the newborn.

TABLES

Table I a: Traditional Practices Related to Newborn Feeding

Studies	Pre lacteal feed given	Colostrums fed	Colostrums discarded	Breastfed within 30 minutes	Breastfed within 2 hrs	Breastfed within 6 hrs	Breastfed 6-24 hrs	Breastfed after 24 hrs
Ahmad S, Goel K et al Aim: To assess newborn care practices in home deliveries. (n=280) Area: Meerut, Uttar Pradesh	62.5%	37.5%	62.5%	-	-	-	-	29.9%
Bobhate PS, Shrivastava SR Aim: To assess the knowledge and practices about breastfeeding among tribal women. (n=132) Area: Khardi, Thane-Maharashtra	23.5%	84.8%	15.2%	35.1%	37.4%	21.1%	-	15.1%
Giridhar L, Lakshmi G Aim: To study the practices regarding colostrums and prelacteals among Gadaba and Konda Dora tribes. of district. (n=600) Area: Vizianagaram, Andhra Pradesh	25.0%	77.2%	22.8%	-	87.3% & 85.3%	-	-	-
Grover P, Chhabra P Aim: To study practices during delivery and neonatal period amongst mothers. Area: Delhi (n= 100)	52.0%	-	-	12.0%	-	44.0%	14.0%	30.0%
Harnagle R, Chawla PS Aim: To study the knowledge, attitude and practice (KAP) of lactating mothers on breast feeding, weaning, immunization and dietary practices. Area: Jabalpur, Madhya Pradesh (n=105)	24.6%	75.2%	-	7.6%	-	63.8%	2.8%	2.9%
Kestertona AJ, Cleland J Aim: To explore the local newborn care practices in rural area. (n=388) Area: Rural Bangalore, Karnataka	91.9%	-	-	-	23.4%	-	-	47.6%
Madhu K, Chowdary S, Masthi R Aim: To describe the breastfeeding and newborn care practices in rural areas. Area: Kengeri, Karnataka (n=100)	19.0%	-	19.0%	44.0% Home delivery	-	-	-	19.0%

Table I b: Traditional Practices Related to Newborn Feeding

Studies	Pre lacteal feed given	Colostrums fed	Colostrums discarded	Breastfed within 30 minutes	Breastfed within 2 hrs	Breastfed within 6 hrs	Breastfed 6-24 hrs	Breastfed after 24 hrs
Mahmood SE,Srivastava A et al. Aim: To assess the pattern of infant feeding and its relation to certain practices of maternity and newborn care Area: Bareilly, UttarPradesh (n=123)	15.4%	84.6%	15.4%	78.8%	-	-	-	-
Nimbalkar AS, Shukla VV et al. Aim: To study the newborn care practices and health seeking behavior in urban slums and villages. Area: Anand, Gujarat (n=314)	-	-	-	64.6%	18.7%	1.2%	-	9.2%
Paudel DP, Nilgar BR, Bhandankar M Aim: To explore the delivery and newborn care practices of mothers during their last child birth. Area:Rura Belgaum, Karnataka (n=630)	10.0%	98.4%	1.6%	73.3%	17.0%	-	-	1.9%
Reshma, Sujatha R Aim: To explore cultural beliefs and practices of newborn care Area:Mangalore, Karnataka (n=157)	31.0%	84.0%	16.0%	-	-	-	-	-
Roy S, Dasgupta A, Pal B Aim: To assess the feeding practices of children in an urban slum of kolkata. Area: Chetla, Kolkata (n=120)	29.16%	90.0%	10.0%	16.7%	-	-	-	23.3%
Shaili V, Parul S, et al. Aim: To know the breastfeeding practices of mothers with a view to strengthen these practices for improving the health of newborns. Area: Dehradun, Uttarakhand (n=500)	61.3%	87.2%	12.8%	21.4%	-	21.6%	4.27%	52.7%
Shwetal B, Pooja P et al. Aim: To evaluate the knowledge and practice of postnatal mothers for early initiation of breastfeeding. Area: Vadodara, Gujarat (n=175)	12.6%	88.6%	11.4%	13.2%	34.3%	9.7%	3.4%	20.0%
Singh J, Vishakantamurthy DG et al. Aim: To describe the factors influencing breastfeeding practices. Area: Mysore, Karnataka (n=280)	53.0%	64.0%	36.0%	-	7.4%	-	-	1.7%

Table I c: Traditional Practices Related to Newborn Feeding

Studies	Pre lacteal feed given	Colostrums fed	Colostrums discarded	Breastfed within 30 minutes	Breastfed within 2 hrs	Breastfed within 6 hrs	Breastfed 6-24 hrs	Breastfed after 24 hrs
Thakur N, Arunkumar Aim: To find out practices of Ganda community on newborn feeding. Area: Raipur,Chattisgarh (n=160)	17.5%	82.5%	17.5%	-	61.8%	-	-	10.0%
UNICEF.Coverage Evaluation Survey. All India Report. (n=22653) Aim: To assess the breastfeeding practices among women with infants.	11.5%	85.3%	14.7%	33.5%	24.2%	-	-	23.9%
Vijayalakshmi S, Patil R, Dutta SS Aim: To study the newborn care practices and its determinants in a rural area of Puducherry, India Area: Puducherry (n=138)	5.9%	97.8%	2.2%	64.7%	-	-	-	-
Wadde SK,Vedpathak,VL,Yadav VB Aim: To describe the breastfeeding practices in rural mothers. (n=306) Area: Ambajgoi- Beed, Maharastra	40.2%	91.2%	8.8%	24.8%	-	-	24.4%	14.1%
Wagh SV,Wagh SS et al. Aim: To study infant feeding practices Area: Vidarbha, Maharastra (n=246)	15.8%	-	-	80.4%	-	-	-	-
Yadavannavar MC, Patil SS et al. Aim: To study the sociocultural factors affecting breast feeding and decisions among rural women. (n=240) Area: Bijapur, Karnataka	91.6%	35.0%	65.0%	-	23.3%	-	-	35.1%

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