ORIGINAL ARTICLE

A COMMUNITY BASED STUDY ON BREASTFEEDING PRACTICES IN A RURAL AREA OF UTTARAKHAND

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ABSTRACT

Background: Breast feeding is the safest, least allergic and best infant feeding method. It has nutritional, immunological, behavioral and economic benefits and also provide desirable mother infant bonding. Despite the demonstrated benefits of breastfeeding, breastfeeding prevalence and duration in many countries are still lower than the international recommendation of exclusive breastfeeding for the first six months of life .

Objective: To know breast feeding practices of mothers with a view to strengthen these practices for improving the health of infants.

Materials & methods: Community Based Cross sectional study was conducted in the field practice area of Rural Health Training Centre. 500 mothers having children between 0-3years age group were included in the study .Self administered questionnaire was used to collect information on breastfeeding practices in the initial six months of birth of the child.

Results: The study findings revealed that majority of children were breastfed (93.6%). Initiation of breastfeeding within an hour was practiced by only a few mothers (21.37%). Only 5.13% babies were exclusively breastfed till six months. Prelacteal feeds & colostrum was given to most of them i.e. 66.03% & 87.18%.

Conclusion: This shows that undesirable cultural practices such as giving pre-lacteals, late initiation of breast feeding are still prevalent among the community & these should be discouraged by proper BCC activities. For successful feeding, mothers need active support, care & privacy during pregnancy & following birth, not only of their families & communities but also of the entire health system.

Keywords: Prelacteal feeds, Colostrum, Exclusive Breastfeeding, BCC, Community

INTRODUCTION

Appropriate feeding is crucial for the healthy growth and development of the infant. Breastmilk is the natural first food for babies. It continues to provide upto half or more of the child's nutritional needs during the second half of the first year, and upto one third during the second year of life¹. Breast feeding is the safest, least allergic and best infant feeding method. It has nutritional, immunological, behavioral and economic benefits and also provide desirable mother infant bonding.

It is now established that the breast feeding practices adopted in terms of duration, frequency and exclusiveness is essential for our understanding of impact of breast feeding on complete physical, mental and psycho-social development of the child. Despite the demonstrated benefits of breastfeeding, breastfeeding prevalence and duration in many countries are still lower than the international recommendation of exclusive breastfeeding for the first six months of life (WHO, 2002)²

In India, breastfeeding is almost universal. However, the rates of early initiation, exclusive breastfeeding are far from desirable. The beneficial effects of breastfeeding depend on time of breastfeeding initiation, its duration and the age at which the breastfed child is weaned3. Breastfeeding practices vary among different regions and communities. A study of prevalent breast feeding practices is essential before formulation of any need based intervention programme and to outline trends breastfeeding pattern. Though, there are reports on health and nutritional aspects of hilly regions of Uttarakhand however, very few studies exists on breastfeeding practices from the villages of this state. Hence, an effort was made to study the breast feeding practices in rural areas of Uttarakhand with respect to pattern of breastfeeding in the initial 6 months in children less than 3 years of age with reference to breastfeeding indicators of the WHO.

MATERIAL & METHODS

The present cross-sectional study was conducted amongst mothers having children between 0-36 months of age group in the field practice area of Rural Health Training Centre(RHTC) of Department Community Medicine, Himalayan Institute of Medical Sciences, Dehradun. This centre is situated at about 5 kms from the Medical College and caters to a population of about 12,500 from 8 villages. All the mothers of children less than 36 months old were included in the study. A total of 500 mothers had children less than 36months of age, of which, 468 mothers everbreastfed their infants & hence data pertaining to breastfeeding practices was asked in detail from mothers of babies who were breastfedi.e.468. A house to house survey was conducted and the researcher herself filled the pre-tested closed ended structured questionnaire. Informed consent was taken from each of the participants. The related information regarding appropriate breastfeeding practices in the initial six months was taken for example, initiation & frequency of breastfeeding, colostrum feeding, exclusive breastfeeding. Structured questionnaire required 20 min. to half an hour. The study was carried out for a period of one year i.e. May 2009 till April 2010. The terms and definitions for Infant and Young Child Feeding Practices were according to National Guidelines on Infant and Young Child Feeding⁴. The information thus compiled, obtained were tabulated analyzed statistically to draw out observations and meaningful conclusions.

RESULTS

Out of total 500 children, 258(51.6%) were males and 242(48.4%) were females. In our study 93.6 % of the sample mothers have ever breastfed their infants, of which almost equal no of male (50.85%) & female babies (49.15%) were being fed. (Table 1). Our study pointed out that 100(21%) babies born were put on breast within first hour of life in line with the WHO recommendation out of which majority (55%) of babies were female & 45% male, although the difference between the two was not statistically significant. Almost equal no of newborn (21.6%) received breast milk 1-6hr of birth & Breastfeeding on the second-third day was observed in 26% of the women & equal no of newborn got breast milk after a lapse of three days of birth(Table2).

Table 1: Distribution according to Ever breastfed children (n=500)

Ever	Distribution	Total(%)	
breastfed	Male(%)	Female(%)	-
Yes	238 (50.85)	230 (49.15)	468 (93.60)
No	20 (62.50)	12 (37.50)	32 (6.40)
Total	258 (51.60)	242 (48.40)	500 (100.0)

As per the international recommendations breastfeeding should always be on demand or as often as the child expresses need which is in line with our findings in which almost 89% babies were breastfed on demand (Table3). 72% of the mothers use to feed their babies till the baby sleeps or leaves on its own (Table3) which signifies that majority of the babies were fed adequately. A higher no. of newborn (76.5%) was fed from both breasts at a single feed. Actually every child should receive colostrum but in the present study more than two-third (81.6%) of the mothers had given colostrum to their newborn baby (Table3). Here 61.8% of newborns received prelacteal feed (Table3). In our study only 5.13% received exclusive breastfeeding which is far beyond the WHO recommendation (Table3). Male babies excel their female counterparts in all the above indicators but the difference was found to be statistically significant only on frequency of breastfeeding & duration of each breastfeed (till the baby sleeps).

Table 2: Distribution according to breastfeeding initiation time (n=468)

Initiation of	Distribution of children		Total (%)	Z-test (p-value)	
Breastfeeding	Male (%)	Female (%)			
<1hr	45(45.00)	55(55.00)	100(21.37)		
1hr-6hr	54(53.47)	47(46.54)	101(21.58)	1.00 (> 0.05)	
7hr-24hr	11(55.00)	9(45.00)	20(4.27)	1.32 (p>0.05)	
>24hrs	128(51.82)	119(48.18)	247(52.78)		

Table 3: Distribution according to Breastfeeding Practices (n=468)

Variables	Distribution of children		Total (%)	Z test (p value)
	Male (%)	Female (%)		
Duration of each breastfeed				
<10min	58(43.61)	75(56.39)	133(27.78)	1.98 (p<0.05*)
Till the baby sleeps/leaves	180(53.73)	155(46.27))	335(72.22)	
on its own				
Frequency Of Breastfeeding				
On demand	219(52.52)	198(47.48)	417(89.10)	2.05 (p<0.05*)
At regular intervals	19(37.26)	32(62.74)	51(10.90)	
Mode of feeding				
Breastfeed from one side	61(55.46)	49(44.54)	110(23.50)	1.10 (p>0.05)
Breast feed from both side	177(49.44)	181(50.56)	358(76.50)	
Exclusive Breastfeeding				
Yes	14(58.33)	10(41.67)	24(5.13)	0.75 (p>0.05)
No	224(50.45)	220(49.55)	444(94.87)	
Colostrum				
Fed	212(51.96)	196(48.04)	408(87.18)	1.24 (p>0.05)
Discarded	26(28.26)	66(72.00)	92(12.82)	
Prelacteal feed				
Given	159(51.46)	150(48.54)	309(61.80)	0.36 (p>0.05)
Not Given	99(51.83)	92(48.17)	191(38.20)	,

^{*}Statistically significant

DISCUSSION

According to NFHS-3 (India)⁵ the percentage of children who were ever breastfed is almost universal in every state, with a slightly lower percentage in Uttaranchal (90%) which matches well with our study in which 93.6% children were ever breastfed. However positive influences and support could help and negative influences could hinder the process of lactation. Similar findings were reported by Kumar et al⁶ where 93.40% infants were given breast milk as their first food.

According to IYCF (2006) guidelines⁴, Government of India recommends that initiation of breastfeeding should begin immediately after birth, preferably within one hour. Practice of late initiation of breastfeeding may be due to mother's illiteracy, low socioeconomic class, and majority of deliveries taking place at home. Other reasons could be wrong customs & beliefs, less milk secretion, mother too tired to

feed; baby was sleeping. This reflects that the mothers were not motivated adequately for early initiation of breastfeeding. In contrast to other studies, this study shows that delayed breast-feeding(>1hr) is still practiced in the rural areas of Uttarakhand. In our study, although the first hour feeding rates was less but almost half of the babies(47.22%) were breastfed with in the first 24hrs, which compares well with the findings of NFHS-3 (India)5, Takalkar etal7 & Kar et al⁸. In contrast to our findings breastfeeding within 1hr & 24 hr was lower in study by Kumar et al9 & Chatterjee et al10where breastfeeding within 1 hour was only 6.3% & 14.54% and 32.6% within 24 hours. These differences may be due to the timings when study was conducted, regional differences and sampling techniques.

In our study, 87% babies were fed colostrum which matches well with the findings of Thakur

et al¹¹ & Takalkar et al⁷ & Parmar et al¹² .In contrast to our findings, in a study in U.P.¹³ 11.8% of the women gave colostrum to their infants & Taja *et* al. (2001) ¹⁴ in a district of MP found that only 22.7% of mothers had given it to their baby. This variation was mainly due to different types of customs prevalent in India and presence of greater awareness regarding colostrum among our study subjects may be due to greater awareness of health workers in our area.

Regarding Prelacteal feeds our figures are in corroboration with NFHS-3 5which states that 60% newborns received Prelacteal feed. In our study, the prevalence of prelacteal feeding was higher (66.03%) than other studies, and most important reason cited was family customs and relatives' advice. It is a very common belief that, child takes/looks after the person who gives prelacteal feed to the child. Not only grandparents but the young people, also believed this. This suggest that population of rural areas of Uttarakhand believe more in customs and religion. Honey and "Gur ghutti" was the most popular prelacteal feed used. Exclusive breastfeeding was practiced only by 5.13% mothers in this study. Anonymous findings were reported by a study in Orissa¹⁵ where only 8.6% mothers continued with EBF whereas, according to a study by Benjamin et al (1993) at Punjab¹⁶ & Aggarwal et al at Delhi¹⁷, it was 57.7% & 63.50% respectively. But in this study majority (69.8%) had received water as their parents or relatives thought that child needs water during summer season. This is a very important message which needs to be conveyed to mothers that breast milk itself would suffice the thirst of the infants for the first six months. Findings indicate that the practice of exclusively breastfeeding as recommended by the international organizations is far away & more efforts has to be made for increasing the exclusive breast feeding in the rural areas of Uttarakhand.

Feeding on demand was found in majority (89%) of mothers. Similarly it was found to be 84.1% in a study in Bengal¹⁸. In yet another study at Kanpur¹⁹ it was found to be only 38%. Demand feeding has earlier been reported to be a common practice in India, a factor, which has a positive influence on breast-feeding. This is also recognized as one of the ten steps to successful breast-feeding as recommended by WHO / UNICEF.

CONCLUSION

Thus it can be concluded from the results that breast feeding was popular in rural women though their knowledge about the same needs to be improved. Since their perceptions regarding the feeding practices directly influence the health of the child therefore false beliefs & myths attached to child's feeding deeply rooted in all strata of community need to be replaced by sound & scientific messages.

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