

Breastfeeding Practices in Infants of Urban and Rural Areas of Parbhani District, Maharashtra

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Abstract

Breastfeeding is associated with numerous health benefits to offspring and mothers and may improve maternal-infant bonding. The present investigation was carried out to assess the breast feeding practices among rural and urban area of Parbhani District. A community based, cross-sectional study was conducted in an urban and rural area of Parbhani District, Maharashtra state. The study variables such as initiation of prelacteal feed, colostrum, time of initiation of breast feeding frequency of breast feeding, breast feeding during mothers illness and reasons for discounting breast feeding. The data generated was analyzed statistically. Results inferred that near about 50 percent rural and 40 percent urban mothers followed the practice of giving prelacteal feed to the new born. Maximum per cent of urban (80) and rural (77) mothers gave colostrum to their infants. It was noticed that among 50 percent of infants weaning was not started at the recommended age, i.e. 6 to 7 months. More per cent of rural (88) mothers have started breast feeding within one hour of delivery as compared to urban (53.5) mothers. It was found that the scheduled feeding pattern was followed among urban (59%) mothers. Whereas, in rural (55%) mothers demand feeding was more commonly used. Majority of mothers from both areas found to be breast fed their infants even when they were suffering from illness, which found to be good practice. In conclusion results inferred that there is need to improve the awareness of mothers regarding various aspects of correct and sound breast feeding practices to promote the health of infants.

Keywords: Breast feeding; Infant; Prelacteal feed; Colostrum

Introduction

Infant and young child nutrition has been engaging the attention since long for the very simple reason

that growth rate in the life of human being is maximum during the first year of life. Infant feeding practices comprising of both the breastfeeding as well as complementary feeding have major role in determining the nutritional status of the child (Govt. of India, 2006).

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Although Breast feeding is universal in India, but exclusive breast feeding and appropriate weaning practices rates are not satisfactory, various socio cultural factors influence these practices which vary from region to region (Ministry of Health and Family Welfare, 2007). However, the prevalence of exclusive breastfeeding is very low in many developing countries.

Breast feeding has a unique biological and emotional influence on the health of both the mother and the young child (Ogunlesi, 2010). Breastfeeding

is not only important for young child survival, health, nutrition, the development of the baby's trust and sense of security but it also enhances brain development and learning readiness as well. A breastfed baby is likely to have an IQ of around 8 points higher than a non-breastfed baby.

Appropriate breast feeding practice ranks first among the most effective interventions to improve health of child. A great asset in India is that an average Indian mother although poor in nutritional status, has a remarkable ability to breast feed her infant for prolonged periods. However, some inappropriate breast feeding practices do exist in India. Therefore the present investigation was carried out to assess the breast feeding practices among rural and urban area of Parbhani District.

Materials and Methods

A cross-sectional research design was adopted for the study and a purposive random sampling technique was followed to select the subjects. A total sample of 400 mothers with infants of the age of 0 to 24 months was selected from urban (200) and rural (200) areas of Parbhani district of Maharashtra state. Four talukas namely Parbhani, Selu, Manwat and Gangakhed and one village from each talukas namely Brahmangaon, Mhalsapur, Rudhi and Koudgaon respectively were selected for the study. The data was collected by questionnaire and in-depth interview. The efficacy of questionnaire was pretested through pilot survey carried out on 25 selected mothers for assessing feeding practices

of infants. All the selected 400 mothers were personally interviewed by the investigator with the help of pretested questionnaire so as to elicit the information regarding initiation of prelacteal feed, colostrum, time of initiation of breast feeding, frequency of breast feeding, breast feeding during mothers illness and reasons for discontinued breast feeding. The data generated was analyzed statistically.

Results and Discussion

Out of 400 selected mothers from urban and rural areas 167 had given some kind of prelacteal food to the infant. The percentage was more among rural mothers (47.5) than that of urban mothers (36). The difference was found to be significant statistically (Table 1). Prelacteal foods are usually administered due to colostrum deprivation and delayed initiation of breastfeeding, apart from some social customs and beliefs. In present study more percentage of infants were given prelacteal foods it may be due to advise given by elderly females of families (Grand parents) as they played a major role in influencing the practice of breast feeding. Most of these elders were illiterates and they considered colostrum as something indigestible, not good for baby's health and also unaware of hazards of prelacteal feeds. Even other group of workers (Gupta et al., 1997, Dave et al. 2014 and Kumar et al., 2015) also reported that the percent of giving prelacteal feed was ranging from 40 to 48 which is near about similar to results of present study.

Table 1: Percentage of prelacteal food given to new born baby (N = 400)

Sr. No.	Categories	Number	Percent	'Z' test
1	Urban	72	36	2.76**
2	Rural	95	47.50	

** – significant at 1% level

It is clear from Table 2 that honey, sugar water, glucose water and *gutti* were commonly used as prelacteal foods for infants. It was found that honey was given as a prelacteal food among more number of infants from urban (62) and rural (82) areas. While sweet water as prelacteal food was given to 8 and 10 new born babies of urban and rural areas. Whereas, only two each of urban and rural mothers gave glucose water to infants as prelacteal feed even *gutti* was given as a prelacteal feed to only one infant from rural area. It was found that more percent of urban mothers found to be giving prelacteal food to

infants than those of rural mothers.

On the whole, results showed that practice of giving prelacteal foods was more common among selected respondents but this custom increases the chances of infection to the infant. Moreover prelacteal foods are not recommended because of the resulting effect on the onset of lactation and on perinatal morbidity and mortality. This finding is in close conformity with results of the study conducted by Galhotra et al. (2008), Patil et al. (2009) and Suhsma et al. (2013). They found that commonly given prelacteal feed was honey.

Table 2: Type of prelacteal food given to new born baby

Sr. No.	Type of food	Percent of new born baby	
		Urban (N = 72)	Rural (N = 95)
1	Honey	86.1 (62)	86.3 (82)
2	Glucose water	2.7 (02)	2.10 (02)
3	Sugar water	11.1 (08)	10.5 (10)
4	Gutti	-	0.1 (01)

Figures in parentheses indicate number

Information on colostrum given to the selected infants and young children is presented in Table 3. Results indicated that maximum percent of urban (80) and rural (77) mothers gave colostrum to their infants. Whereas, minimum percent of urban (20) and rural (23) mothers had discarded colostrum due to the advice of relatives and not having awareness regarding benefit of colostrum. This wrong belief in community should be changed by creating awareness about the importance of colostrum to their child. The practice of breastfeeding was followed by all the selected mothers of urban and rural areas.

A study conducted by Ashwini et al. (2014) revealed that the significant difference was noticed in the practice of discarding colostrum between urban and rural mothers. On the contrary, the results of the present study showed no significant difference.

The findings of present study indicated that the mothers found to discard colostrum due to elders' advice. Similar observations were also reported by Yadav and Singh (2004) and Ashwini et al. (2014). Hence, it was advisable not to educate only mothers but also the elder members of the family.

Table 3: Information on colostrum given to infants and young children

Sr. No.	Colostrum	Percent of Infants		'Z' test
		Urban (N = 200)	Rural (N = 200)	
1	Yes	80 (160)	77 (157)	0.70 ^{NS}
2	No	20 (40)	23 (46)	

Figures in parentheses indicate number

NS- non significant

It was found that maximum percent of rural (88) and urban (53.5) mothers had initiated the breast feeding within one hour of delivery and significantly more by rural mothers whereas 37 percent and 8.5 percent urban and rural mothers reported that they initiated the breast feeding within one to five hours of delivery respectively. Majority of urban and rural mothers initiated breast feeding within one hour of delivery which is nutritionally sound practice. Even the World Health Organization recommends initiation of breast feeding within one hour of birth which provides benefits for both mother and child (Table 4)

Earlier researchers Galhotra et al. (2008) and Nayak et al. (2010) observed that majority of mothers started breast feeding within one hour of delivery. Thus the results of the present study are in conformity with the findings of the above studies.

The findings of the study also revealed that 9.5 percent and 3.5 percent of urban and rural mothers

had initiated breast feeding after 24 hours of delivery respectively. Delayed initiation of breastfeeding was noticed in more percent of mothers of urban area as compared to rural area. It may be most probably related to the physical condition of the mother after delivery. It was noticed that the percent of caesarian delivery cases were more among urban mothers and they were not feeling well enough to be able to breast feed in painful conditions associated with caesarian section. The results of the study conducted by Muchina and Waithaka (2010) and Patel et al. (2011) are in line with the results reported in present study that, the reasons for failure to breast feed within one hour, were insufficient milk production, inability of the infant to suck at the breast and obstetric problems and caesarean deliveries.

A relatively very high percent (97.5) of urban as well as rural mothers continued breastfeeding after six months of infants age. Whereas the remaining

2.5 percent of urban and rural mothers were discontinued breastfeeding after six months of infants age because of inadequate milk secretion, mothers illness and mother became pregnant again.

In regard to frequency of breastfeeding it was noticed that more percent of urban (59) mothers were breastfeeding their infants on regular interval and the remaining 41 percent mothers breastfed their infants on demand. In case of rural mothers it was found that maximum percent of rural (55) mothers breastfeed their infant on demand whereas minimum percent (45) of mothers had frame schedule to breastfed to their infants. Difference in the practice of demand and scheduled breastfeeding pattern among urban and rural mothers was significant statistically. It was noticed that around

50 percent were not following demand feeding pattern. It has been observed that working place of more number of urban mothers was far away from home compared to rural mothers. Hence, probably it was not possible for them to practice demand feeding as done by rural mothers. Apprehension among the urban mothers regarding the growth of the infant may also be the reason for their time bound feeding.

Srivastav et al. (2010) also observed that 38 percent mothers were breast feeding on demand. On the contrary, Kumari et al. (2017) reported that all the studied subjects followed "On demand" breast feeding schedule. This is in concurrence with a WHO collaborative study (1981) conducted on rural Indian women were 100 percent of mothers breast fed their infants on demand.

Table 4: Distribution of infants according to breastfeeding initiation time (N = 400)

Initiation of Breastfeeding	Percent of Infants		'Z' test
	Urban (N = 200)	Rural (N = 200)	
<1 hrs	53.5 (107)	88 (176)	7.84**
1 hr-5 hrs	37 (74)	8.5 (17)	12.6**
5 hrs-24 hrs	-	-	-
>24 hrs	9.5 (19)	3.5 (7)	2.16*

Figures in parentheses indicate number

** – significant at 1% level

* – significant at 5% level

Information of breastfeeding during mothers illness is given in Table 5. Out of 400 selected mothers 182 urban and 180 rural mothers had some or other illness during the period of lactation. Results showed that majority of urban (70%) and (59.51%) rural mothers breastfed their infants when they were suffering from illness and the remaining 21 percent and 30.5 percent mothers of urban and

rural areas stopped breastfeeding when they were sick (Table 6). Mothers discontinued breastfeeding during illness due to advice given by mother or mother-in-law, doctor's and friends. Sushma et al. (2013) reported that more percent of mothers continued breast feeding even during illness than that of found in present study.

Table 5: Percentage of breastfed infants during mothers illness

Categories	Percent of Infants		'Z' test
	Urban (N = 200)	Rural (N = 200)	
Yes	70 (140)	59.51 (119)	1.84 ^{NS}
No	21 (42)	30.5 (61)	1.64 ^{NS}
Not Applicable	9 (18)	10 (20)	-

Figures in parentheses indicated number NS – non significant

Reasons for discontinuation of breast feeding are given in Table 6. Out of the selected 400 mothers 28 urban and 55 rural mothers discontinued breast feeding to their infants. It was found that 25 percent urban and 29.1 percent rural mothers discontinued breastfeeding to the infants due to inadequate milk secretion. Whereas infants were not sucking well

on breast was one of the reason quoted by three and nine mothers of urban and rural areas respectively. It was observed that 10.71 percent of urban and 16.36 percent of rural mothers discontinued breastfeeding because they became pregnant again. Even 28 percent of urban and 16.36 percent of rural mothers discontinued breastfeeding due to

the illness. Only seven mothers belonging to urban area stopped breastfeeding because of their job pattern.

These findings are in close conformity with results of the study conducted by Taneja (2003) who reported that 66.7 percent of mothers belonging to

rural area of Delhi were discontinued breastfeeding due to insufficient milk secretion. Even Sushma et al. (2013) reported inadequate milk (54.6%) secretion followed by sucking difficulties by the baby were the most common reasons quoted by mothers for discontinuation of breast feeding.

Table 6: Reasons for discontinuation of breastfeeding to infant

Reasons	Percent of Infants	
	Urban (N = 28)	Rural (N = 55)
Inadequate milk secretion	25 (7)	29.09 (16)
Not sucking well on breast	10.71 (3)	16.36 (9)
Mother got pregnant	10.71 (3)	32.72 (18)
Mother became sick	28 (8)	16.36 (9)
Job pattern of mother	25 (7)	-

Figures in parentheses indicate number

Conclusion

On the whole, Practices of giving prelacteal feeds was more among urban mothers than that of rural mothers mostly honey was given as a prelacteal food. Majority of the mothers breast fed their infants and gave colostrum to their infants. More number of rural mothers have started breast feeding within one hour of delivery as compared to urban mothers. It was found that the scheduled feeding pattern was followed among urban area whereas in rural area demand feeding was more common. Majority of mothers from both areas found to be breastfed their infants even when they were suffering from illness. Still there is a scope for improving correct and sound practices of breast feeding through mass media and implementation of relevant programmes at community.

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