



### Original Research Article

## Knowledge, Pattern and Practices of Breast feeding among mothers of rural and urban communities

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### Abstract

**Background:** Breast milk is natural, economical and biological fluid considered as ideal nutrition for infants. World Health Organization (WHO) also recommends exclusive breast feeding (breast milk only, no water or other fluids or solids) for six months. Yet the effective and successful breast feeding rates have been low for decades. In developing countries like India, several factors like religion, educational status of mother, residence, customs, economical status of the family etc affect the breast feeding patterns and practices.

**Aim & Objectives:** The aim of this work was to compare and evaluate the role of maternal knowledge, demographic, cultural and social factors in breast feeding pattern and practices among rural and urban mothers. This may help the policy makers and health service providers in future.

**Materials & Methods:** This was a cross-sectional study conducted in convenient places of western Odisha. The period of the study was from March 2017 to February 2018. Total of 930 mothers were included in the study, out of which 480 were from rural and 450 from urban communities. Mothers were included in the study groups after interview. They were provided to fillup a pretested questionnaire. Datas were collected regarding demographic, socio-economical factors which may affect the breast feeding patterns and practices among mothers in rural and urban communities.

**Result:** In the present study, 45.8% of rural mothers and 16.8% of urban mothers were fully employed, although most of the mothers in both the communities were housewives and belonged to Hindu religion. About 56% (252) of mothers in urban area had given colostrums to their infants as compared to that of 40.6% (195) in rural area.

**Conclusion:** Infant feeding practices are better in urban area than the rural area. However the rate of effective and successful breastfeeding are low in both the communities.

**Keywords:** Breast milk, Breast feeding practices, colostrums, rural area.

## Introduction

Breast milk is economical, convenient and natural biological fluid for infants. All mothers must be emotionally and physically prepared and motivated to establish successful breastfeeding. Because effective breastfeeding is one of the most important determinant of Childs health and survival<sup>(1)(2)</sup> Worldwide, around 5.6 millions children died in first year of life, of those 2.6 millions died in first month of life.<sup>(3)</sup> Approximately 7000 newborns died every day, mostly within first seven days after birth. <sup>(4)</sup>In India, about 2.92% of total population is constituted by infants in the age group 0 to 1 year. In 2015, India recorded 37 infants death per 1000 live births, of which 67.8 % infants died in first month of life.<sup>(5)</sup> WHO (World Health Organization) recommended exclusive breast feeding up to 6 months that can be extended upto 2 years or beyond provided adequate complementary food is given to the child.<sup>(6)</sup> Though early initiation of breastfeeding and exclusive breast feeding play dominant role in reducing the infant mortality, in India around 45% children receives breast feeding within first hour of birth and 65% are exclusively breast fed.<sup>(7)</sup> In developing countries like India, breastfeeding practices are influenced by multiple factors like cultural, social, educational status etc.<sup>(8)</sup>

## Aim and Objective

The present study aimed to compare and evaluate the role of maternal knowledge, demographic, cultural and social factors in breast feeding practices among rural and urban mothers.

## Material and Method

The present study was a cross sectional study conducted in convenient places of western Odisha. The period of study was March 2017 to February 2018. A total of 930 mothers were included in this study, out of which 480 were from rural communities and 450 were from urban sector. Inclusion criteria includes mothers having healthy and full term baby of 0 to 1 years age. Mothers

of infants having congenital diseases, autosomal disorders or any chronic diseases that required long term treatment were excluded from the study. Mothers were interviewed and those who fulfilled the inclusion criteria were selected for the study. A structured, pretested and self questionnaire was designed to collect information regarding maternal knowledge, pattern and practices of breast feeding. Mothers were approached for filling up the questionnaire. Blanks and options were provided in the questionnaire. The demographical details of the study includes age of mother, age of child, religion of the parents, socioeconomic status, educational status ,initiation duration and pattern of exclusive breast feeding, any hazards during feeding, any supplementary feed supplied to the baby during 0-6 months of age, knowledge about advantages of breast milk to the baby as well as mother etc. Birth weight of the child was recorded during the time of the visit. In rural area, mothers were randomly approached at tertiary care center, private clinic and through anganwadi centers. In urban area, data were collected from the convenient places of PHC and through the health workers of sub centers. Data were processed and analyzed in computer by using Microsoft excel and SPSS window version 18 software. P-value < 0.05 was considered as significant. Chi-square test was applied.

## Result

In the present study, the important factors relating to breast feeding pattern and practices were analysed through a self administered questionnaire as shown in table-1.

**Table-1** Profiles of the study

Age of the baby	In yrs
Age of the mothers	In yrs
Religion of the family	Hindu/Muslim/Christianity
Socio-economic status	Upper/middle/lower
Employment of the mother	Employed/housewife
Delivery details	Place(institutional/home)/type(cs/nvd)
Timing of initiation of the breast feeding	<1hr/1to4hr/4 to 24hr
Prelacteal feed given	Yes/no
Influential persons on the mothers feeding decision	
Any hazards encountered during breast feeding	Yes/no, if yes, what ?
Duration of exclusive breast feeding	<6 months/> 6 months
Knowledge regarding benefits of mothers milk to baby	
Knowledge regarding benefits of breast feeding to the mother	
Whether provided any supplementary feeding to the child within 6 months or not	Yes/no, if yes what ?

In the present study, it has been found that 72% (324) of mothers age in urban and 62.9% (302) in rural areas were between the age group of 20 to 25 years. Also most of the mothers were housewives (83.1% in urban and 54.1% in rural sector).But 45.8% of mothers in rural communities were fully

employed as compared to that of 16.8% in urban communities. While comparing the socio-economical status and religions, most of the families were belonged to middle class and Hindu in both the groups as shown in table-2.

**Table-2** Demographical parameters

parameters	Urban mothers(n=450)	Rural mothers(n=480)
Maternal age(in yrs)	18-20 =8% (36) 20-25=72% (324) 25-30=15% (63) >30 =5% (27)	18-20=1.8% (9) 20-25=62.9% (302) 25-30=25% (120) >30 =10.2% (49)
religion	Hindu- 66.8% (301) Muslim-13.1% (59) Christianity-20% (90)	Hindu-72.9% (350) Muslim-8.1% (39) Christianity-18.9% (91)
Socio-economical status	Upper class-7.1% (32) Middle class-54% (243) Lower class-38.8% (175)	Upper class-15% (72) Middle class-60.8% (292) Lower class-24.1% (116)
Employment of mothers	Employed-16.8% (76) Housewives-83.1% (374)	Employed-45.8% (220) Housewives-54.1% (260)

Another important finding of this study is 47.3% (213) of urban mothers and 38.5% (185) of rural mothers had given prelacteal feed to their babies. Regarding the duration of the exclusive breast feeding , more numbers of the mothers (62% =279) in urban areas had given mothers milk to their child exclusively up to 6 months of age as

compared to rural areas which is 43.8% (208). So far as place of delivery is concern, Both the groups reported institutional deliveries maximum in number (82.6% in urban and 95.8% in rural sector). Colostrum was discarded by 44% (198) of urban mothers and 59.3% (285) of rural mothers as shown in table-3.

**Table-3** Feeding pattern & practices

parameters	Urban mothers(n=450)	Rural mothers(n=480)
Timing of initiation of breast feeding	<1 hr=42.8% (193) 1-2hr=54% (243) Within 24 hrs=3.1% (14)	<1hr=36.2% (174) 1-2hr=45.8% (220) Within 24hrs=17.9% (86)
Pre-lacteal feed given	Yes- 47.3% (213) No-52.6% (237)	Yes-38.5% (185) No-61.4% (295)
Colostrums given	Yes-56% (252) No-44% (198)	Yes-40.6% (195) No-59.3% (285)
Duration of exclusive breast feeding	<6 months-38% (171) Upto 6 months-62% (279)	<6 months-56.6% (272) upto 6 months-43.3% (208)
Feeding pattern	exclusive-66.8% (301) partial-23.3% (105) token-9.7% (44)	Exclusive-48.5% (233) Partial-36% (173) Token-15.4% (74)
Demand feeding given	Yes-69.7% (314) No-30.2% (136)	Yes-38.3% (184) No-61.6% (296)
Place of delivery	Institutional-82.6% (372) Home-17.3% (78)	Institutional-95.8% (460) Home-4.1% (20)

## Discussion

In developing countries like India, pattern and practices of exclusive breast feeding is directly influenced by a number of factors like caste, religion, literacy of mothers, economical status, residential places etc. The purpose of this study is to compare the attitude, knowledge, pattern and practices of infant feeding practices among the mothers of rural and urban communities.

In this study, maximum number of mothers in both the groups belonged to the age 20 to 25 years. This may be due to early marriage of girls in our locality. This result is in accordance with the study of Ashwini et al.<sup>(9)</sup>

Another important finding of this study was that in majority of the cases, institutional deliveries were conducted. But inspite of strong emphasis on early initiation of breast feeding and increase rate of institutional deliveries, only 56% (252) of mothers in urban areas fed colostrums to their babies which is comparatively higher than rural areas (40.6%=195). The cause of this was inadequate knowledge about benefits of colostrum. Majority of the mothers admitted that they were influenced to do this by their elders. Gupta et al study also reported the similar findings.<sup>(10)</sup> Similar observations also reported in a study of Yadav & Singh.<sup>(11)</sup>

When we compared both the groups regarding per-lacteal feed, about 47.3% (213) of mothers of urban areas and 38.5% (185) mothers of rural areas reported that they had given prelacteal feed to their child. The most common prelacteal feed was honey. Others were boiled water, cows milk, Ghutti etc. Probably it is customary to sweeten the baby, mouth first by honey. As per the study of Mandal et al, honey was commonly used as prelacteal feed.<sup>(12)</sup> Similar findings was reported in a study of Deshpande et al.<sup>(13)</sup>

Another important finding in this study was that about 45.8% (220) of the mothers in rural communities were fully employed as compared to the urban communities which was only 16.8% (76). However most of the mothers in both the groups

were housewives (83.1% in urban sector and 54.1% in rural sector).

Another highlighting result in this study was duration of exclusive breast feeding was relatively better among the mothers of urban region i.e 62% (279) of the mothers fed their babies minimum upto 6 months. But only 43.3% (208) of mothers in rural area fed their babies upto 6 months. Increase rate of employment status among the mothers of rural communities may be the cause for early discontinuation of breast feeding. Still it is higher than a survey study in national level which reported that the duration of exclusive breast feeding was only 46%.<sup>(14)</sup> A study by Bonapurmath et al also reported the low incidence of exclusive breast feeding upto 4 months.<sup>(15)</sup> However in our study, the rate of exclusive breast feeding was low in both rural and urban areas. Another study also reported the similar findings.<sup>(16)</sup>

In the present study, We also observed that 38.3% (184) of mothers in rural sector and 69.7% (314) of mothers in urban sector gave demand feeding to their infants. The study of Panda et al reported that 90% of mothers fed their child on demand.<sup>(17)</sup>

While comparing both the groups regarding type of breast feeding, about 66.8% (301) of mothers in urban community reported that they had given predominantly mother's milk to their infants as compared to 48.5%(233) among mothers of rural community.

Another significant finding of this study was that 48.9% (235) of mothers in rural communities had given cerelac, cows milk as supplementary food before 6 months of age of infants. But in urban community, it was comparatively less i.e 34% (153).

On the basis of the result of this study, it can be concluded that the attitude, patterns and practices of infant feeding, also the knowledge regarding the beneficial effects of mothers milk was better among the mothers of urban communities than the rural areas. The employment status of mothers, easy availability of baby foods, lack of proper

knowledge about breast feeding etc may be the reason for this. On the contrary, the national survey reported that the infant feeding practices were better in rural area as compared to urban area.<sup>(18)</sup> However the rate of effective and successful breastfeeding are low in both the communities.

### Limitation

In the present study, an attempt has been made to compare and analyse the different factors affecting the breast feeding in rural and urban communities. But one limitation is that the mothers having 0 to 1 year baby were included in this study. so the mothers who had given mothers milk to their infants till recommended 2 years might have missed. Another limitations of this study was smaller sample size. So further studies on larger sample size are required for better result.

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