

## Breastfeeding Practices and Barriers among Rural and Urban Mothers in Delhi

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### Abstracts:

**Context:** Study was conducted to assess the practices, awareness and barriers to breastfeeding amongst rural and urban mothers of Delhi.

**Aim:** To study the breastfeeding pattern and barriers to early initiation and exclusive breastfeeding.

**Settings and Design:** The study was conducted in rural & urban area attached to Dept of Community Medicine, VMMC, Safdarjung and CGHS Maternity and Gynae Hospital R.K.Puram, New Delhi.

**Methods and Material:** The study was conducted from Oct 2015 to Oct 2016 using pre-tested semi-structured questionnaire on 200 mothers with children under 11 months of age, 100 each from rural & urban population.

**Statistical Analysis :** The data collected was analyzed using statistical tests wherever applicable.

**Results:** Mean age of mothers were 25.50 year (SD= 3.697) and 24.80 year (SD = 3.237) in urban and rural area. Mean age difference in rural and urban area ( $p= 0.025$ ) was significant. Early Initiation Rate was higher among urban mothers (35.4%) than rural (30.8%). Late initiation was due to health and cultural beliefs, in which later was found to be more in rural (32.2%) than in urban (26.8%). Exclusive breastfeeding was higher in rural (26.8%) than urban (25.0%).

**Conclusions:** The study clearly brings out lack of awareness and cultural beliefs as reasons for late initiation. Early initiation and continuation of breastfeeding are recommended which can be achieved by spreading awareness.

**Key-words:** Breastfeeding , knowledge, barriers, rural and urban mothers

**Key Messages:** Breastfeeding, rural and urban population of Delhi

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### I. Introduction:

Breastfeeding is the most common natural phenomenon that must occur in the life of a human baby next to breathing and sleeping. As a goal for optimal child health and nutrition all women should practice exclusive breastfeeding for their newborns from birth to 06 months of age. The word 'nutrition' is derived from 'nutricus' which means to 'suckle at breast'<sup>1</sup>. WHO recommends Exclusive Breastfeeding (EBF) for the first 6 months of life as the best way of feeding an infant.<sup>2</sup> Breastmilk is baby's first immunization. Breastfeeding should start within half an hour after normal delivery and within four hours after caesarean sections. It also helps in stimulating the production of breast milk. The first milk or colostrum is most suitable for the baby because it has high concentration of nutrients and proteins that protect the baby from many infections. EBF means giving only breast milk as an optimal mode of feeding for infants younger than 6 months.<sup>3</sup> EBF is defined as giving breast milk only, to infants from 0-6 months, and not feeding any food or liquid, not even water, with the exception of drops of syrups of vitamins, mineral supplements or medicine as only recommended by the health workers.<sup>1,4</sup> A global health journal series on child survival identified the promotion of EBF of infants during the first 6 months of life and continued breastfeeding to 12 months as the single most-effective preventive public health intervention for reducing mortality among children aged, 5 years and below.<sup>1,5</sup> Breastfeeding is, however a complex process governed by psychological and physiological factors, which in turn are conditioned by a wide spectrum of environmental, socioeconomic and cultural circumstances.<sup>1,6</sup> Mortality rate in young infants who are not breast-fed is 25-time higher because of diarrhoea than those who are exclusively breast-fed . Even in malnourished women, breast-milk output is sufficient to maintain growth of infants. The addition of early food supplements to infants fed under prevailing environmental conditions in developing countries leads to their increased diarrhoeal attacks and associated reduced food intake. Breast-feeding helps maintain hydration status during diarrhoeal episodes and should be continued during diarrhoea when the infants often refuse other foods, specially non-human milk. Health professionals need to understand the skills for the management of breast-feeding, so that mothers are given appropriate advice on how to breast-feed and counteract associated

problems.<sup>7</sup> Ever increasing institutional deliveries in India has shifted the responsibility of timely initiation and continuation of breastfeeding from peripheral health workers and families to the nursing care providers of health facilities where the births take place. While institutional deliveries have increased to 72.6%, only 44.6% of the newborns enjoy early breastfeeding in India.<sup>7,8</sup> In 1981, WHO introduced the International Code of Marketing of Breast-milk Substitutes and in 1983, the Indian Govt. adopted a National Code for Protection and Promotion of Breastfeeding. In the year 1989, WHO and UNICEF issued the slogan 'Protecting, Promoting and Supporting Breast-feeding.

#### **Aim**

1. To study the pattern of breast feeding practices among rural & urban mothers.
2. To find out the barriers to early initiation and exclusive breastfeeding.

#### **II. Material and Methods:**

The study was conducted at Deptt. Of Community Medicine, VMMC, and CGHS Maternity and Gynaec Hospital, R.K.Puram, New Delhi, which serve the purpose of teaching, training and departmental research activities and provides both outpatient and inpatient services to the women and children. Mothers of children between age group of 0 to 11 months, who are permanent residents of the area for at least last one year, were included in the study for duration of 12 months beginning from Oct 2015 to Oct 2016. The study was descriptive type of community based epidemiological study with cross-sectional design. A sample of 200 was studied, 100 each from rural & urban population. Mothers unwilling to participate in the study and those who were migrants were excluded from this study.

A pre-tested semi-structured interview schedule was used to collect both quantitative as well as qualitative data. The interview schedule included information on feeding practices adopted and various variables like parity, mode of delivery, literacy, religion, working status, mother's intention, confidence, knowledge, family support, breastfeeding related problems, any illness, hospital care practices, myths and cultural practices. The data was then compiled, tabulated and analyzed using statistical tests for analysis wherever applicable

#### **III. Result:**

The study comprised of the descriptive profile of study participants and practices regarding breastfeeding. This section presents an overview of demographic characteristics of the sample population including socio-demographic characteristics and selected mother/child characteristics. The range for age of mothers was from 18 to 38 years with mean age of mothers in rural area was 24.80 year (SD = 3.237) and 25.50 year (SD= 3.697) for mothers in urban area. The difference in the mean age of participants in rural and urban area ( $p=0.025$ ) was statistically significant. In rural area, majority of study subjects (65.2%) delivered their youngest child at Govt. institutions while in urban area, majority of study subjects (55.2%) delivered at private institutions. In rural, 8.4% study subjects had home delivery & in urban it was 3.6%. Majority of study subjects in rural (84%) & urban (78%) had delivered by vaginal route. Caesarian section was done in 12.8% of rural and 17.2% of urban study subjects.

10% of mothers in rural & 17.4% of mothers in urban stayed for  $\geq 48$  hours in the hospital during delivery. Breastfeeding information during hospital stay was provided to 81.7% of study subjects in rural & 91.2% in urban. The difference between rural & urban was found to be statistically significant both for hospital stay and breastfeeding information provided during stay.

Only one third (32.2%) of mothers in this study initiated breastfeeding within one hour whereas nearly half (48.4%) initiated within 1-4 hours and 19.4% started breastfeeding after 4 hours or more. As shown in Table 1, Early Initiation Rate was higher among urban mothers (35.4%) than rural (30.8%). However, no statistically significant association was found between these two groups.

Around 52.1% women in rural area stated "milk did not come in yet" as the reason for late initiation, 48.4% women residing in urban areas gave reason as "Baby not accepting breast". Late initiation of breast feeding due to the prevalent cultural beliefs was found to be more in rural (32.2%) than in urban areas (26.8%). Some women also mentioned ill health of baby (22.5%) and ill health of mother (2.75%) as the reason for delay (Table 3). More than half (55.8%) of the mothers gave pre-lacteal feeds to their babies. The pre-lacteal feeds given to the newborns, the most common was honey (30%), followed by sugar water (20%) and plain water (13%).

Statistically significant difference was found in pre-lacteal feeding amongst rural and urban mothers with figures of 67.2 % and 44.4% respectively. The cultural beliefs and rituals were observed to be main reason for giving pre-lacteal feed among both rural and urban mothers (78% and 65.7% respectively). The practice of giving colostrum was found in 61.4% of study subjects with one third (34.4%) of the infants in rural area and 42.8% in urban area were not given colostrum. This difference was found not to be statistically significant.

Exclusive Breastfeeding rate was higher among rural mothers (26.8%) than urban mothers (25%) with no statistical significance (Table 3). Artificial feeding is quite high for both urban and rural areas. Bottle feeding was more prevalent among urban population (41.6%) than rural (29.2%). The difference was also found to be statistically significant. It is recommended that breastfeeding should continue for a period of two years or beyond along with appropriate and adequate complementary feeding. In this study, 10.6% had left breastfeeding before 12 months, 7.6% in rural area and 13.6% in urban area. Only one third of the mothers planned to continue breastfeeding for a period of 18 months, 46 % for 18-24 months and only one fifth beyond two years. It is advocated that breastfeeding should be given both during the day and night to maintain lactation. Majority of women (96.7%) breastfeed more than 5 times during the day and almost all breastfeed during night also. This is a highly appreciated traditional practice that is good for the baby. It is recommended that after six months of age babies should receive complementary feeding with semi-solid homemade healthy foods along with continued breastfeeding.

The main source of breastfeeding related information in rural and urban area was from mother/mother in law/elderly women which was 75.6% and 66% respectively. On the other hand health care providers accounted for 49.6% in urban area as compared to only 29.2% in rural areas. While 62.8% women in urban area were informed about the advantages of continuing exclusive breast feeding for six months, only 48.4% of the rural women were informed. Compared to the women residing in urban areas, only half of the women of rural background had knowledge about nutrition/food for lactating mother, importance of colostrum and on demand feeding. Similar disparity was also observed regarding awareness regarding care of breasts, proper positioning and attachment/latching of baby and pre-lacteal feeds. About 69.2% mothers said that they have seen the breastfeeding posters in urban area as compared to 45.2% in rural area. Out of these, 43.4% mothers in rural area and 54.9% in urban area said that the posters really helped them to decide to breastfeed their infants.

#### **IV. Discussion:**

India has maximum number of under-five deaths and underweight children. Early breastfeeding within one hour and exclusive breastfeeding for first six months are the most important steps to deal with reduction in child malnutrition and mortality. Though there has been a significant improvement in the survival and development of children over the decades, however, lot more needs to be done in India for the effective implementation of these interventions. According to Infant Survival and Development Report Card, Haryana ranks 21<sup>st</sup> in initiation of Breastfeeding within 1 hour (22.1%), 29<sup>th</sup> in exclusive breastfeeding (16.9%) and 27<sup>th</sup> in complementary feeding, 6-9 months (44.8%)<sup>10</sup>.

There are various factors responsible for early initiation of breast feeding. Most of the studies have concentrated mainly on determining factors which influence cessation of breastfeeding. Only a few studies conducted in other countries have attempted to find out the factors influencing exclusive breastfeeding and early initiation. This study was thus aimed to assess breastfeeding practices and to find the barriers and factors responsible for late initiation and ceasing exclusive breastfeeding before six months of age.

Arts et al. reported a wide discrepancy on the prevalence of exclusive breastfeeding between current status based on a 24-hour recording and exclusive breastfeeding since birth<sup>9</sup>. In the present study, the mean age of mothers in rural and urban area was 24.80 year (SD = 3.237) and 25.50 year (SD= 3.697) respectively; the median number of children was two in both the areas. It was found that only 32.2% mothers had started breastfeeding within one hour of birth (Table 1). Gupta et al also found that only 36.6% mothers initiated breast-feeding within 1h of birth<sup>10</sup>. Our finding (33.1%) was higher than national figures. According to the NFHS-3, the initiation of early breastfeeding was only 24.5% across India. In Haryana only 22.3% women (25.2% in urban and 21.3% in rural) initiated breast feeding within one hour of birth. In this study also, early initiation was higher in urban mothers (35.4%) than rural mothers (30.8%). Most common reason given by mothers residing in rural area for the delay was delayed lactation (52.1%) followed by their cultural beliefs (32.2%) whereas in urban area it was inability of baby to suck (48.4%) (Table 2) .Our study shows that more than half of the mothers gave pre lacteal feeds to newborns; more prevalent in rural mothers than urban mothers. The findings of studies by Eram et al were consistent with our findings<sup>11</sup>. Main reason for giving pre-lacteal feed among rural as well as urban mothers was due to their rituals and cultural beliefs e.g. it is believed that a beloved and respected person when gives honey transfers some of his/her traits to the child. Traditional child feeding practices such as feeding infants with herbal concoction are still common in some families.

In our study, it was seen that 38.6% of mothers discarded colostrum - 34.6% in rural area and 42.6% in urban area, which means many infants are deprived of the highly nutritious first milk (colostrum) and the antibodies it contains. This finding is in accordance with the findings of NFHS-3. Studies conducted in India by Khan et al showed that approximately one third of the mothers discarded the colostrum<sup>12</sup>. Deshpande et al stated that early breast milk was believed to be the witch's milk as per old social customs and separation of mother and child after delivery were stated as the reasons to discard colostrum. The belief among the families is that colostrum is dirty milk,hence harmful to the baby and might cause even death. According to few mothers,

colostrum was perceived as milk that had stayed in the breast during the 9 months of pregnancy and thus become stale, therefore it should be discarded.

## V. Conclusion:

The study clearly brings out lack of awareness and cultural beliefs as reasons for late initiation. Early initiation and continuation of breastfeeding are recommended which can be achieved by spreading awareness.

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