

# The Infant Feeding Practices in an Urban Slum of Nagpur, India

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## ABSTRACT

**Background and Objective:** The feeding practices during infancy are of critical importance for the growth and the development of children. Recent studies have reported that wrong feeding practices are widely prevalent in the urban slums. With this background, this study was conducted to assess the infant feeding practices in an urban slum and to determine the factors which influenced it.

**Materials and Methods:** A community based, cross-sectional study was conducted in an urban slum of Nagpur, Maharashtra, India during June 2011 to December 2011. The study variables which were used were the mother's religion, occupation, education, the place of delivery, the type of delivery, the sex

and the age of the baby, the antenatal clinic registration, breast feeding, weaning, knowledge of the mothers, etc. For the statistical analysis, the Fisher's exact test was used.

**Results:** Out of the 384 enrolled mothers, 125(32.56%) mothers had started breast feeding within 1 hour after their deliveries. Colostrum was given by 82(21.38%) mothers. Exclusive breast feeding for 6 months was given by 142(36.84%) mothers. The practice of exclusive breast feeding was more in the literate mothers and in mothers who were informed by the health personnel. This was statistically significant.

**Conclusion:** Inappropriate feeding practices are common in an urban slum of Nagpur, Maharashtra, India.

**Key Words:** Breast feeding, Colostrum, Infant feeding practices, Urban slum

## INTRODUCTION

The World Health Organization (WHO) recommends exclusive breastfeeding during the first 6 months of life for the optimal growth and the development of infants [1]. Breast feeding, in spite of being traditional in our country, is associated with myths and superstitions like colostrum being bad for the baby, etc. [2]. The infant feeding practices are influenced to a great extent by the socio-economic status, education, religion, knowledge, attitude and the beliefs of the mother about child care [3]. The women in the urban slums work outside their homes and they are not protected by the labour laws like maternity or sick leave. This pattern of working affects the breastfeeding practices [4]. Studies have reported that the practices of the early introduction of top feeds and the late introduction of semi-solids have a wide prevalence in urban slums [5]. Little data exists on the breastfeeding and the infant feeding practices in the urban slums of Nagpur and Maharashtra. With this background, this study was conducted to assess the infant feeding practices in an urban slum and to determine the factors which influenced it.

## MATERIALS AND METHODS

A community based, cross-sectional study was conducted at an urban slum of Nagpur, Maharashtra, India, during June 2011 to December 2011. We selected 3 slum areas by a lottery method (a simple random sampling method). The data was collected by interviewing 384 mothers who had children below 1 year of age, in the local languages, by using a pretested and semi structured questionnaire. The study variables which were used were the mother's religion, occupation, education, socioeconomic status,

the place of delivery, the type of delivery, the sex and the age of the baby, the antenatal clinic registration, breast feeding, weaning, knowledge of the mothers, etc. The institutional ethical committee's approval was taken. The statistical analysis was done by using Fisher's exact test. The p value was considered as significant when it was less than 0.05.

## RESULTS

Among the 384 enrolled mothers, Hindus were predominant (170,44.4%). Hundred and eleven (28.94%) were housewives, while the rest were working women. Seventy seven mothers (19.73%) were illiterate and 99(25.65%) were educated beyond secondary school. Sixty six (17.10%) had their deliveries at home. Caesarean sections were done in 83(21.66%). One hundred and twenty five (32.56%) had started breast feeding within 1 hour after their deliveries. Colostrum was given by 82(21.38%) mothers. Prolactal feeds were given by 302(78.61%) mothers. Exclusive breast feeding for 6 months was given by 142(36.84%) mothers. Complimentary feeds were introduced at 6 months by 158(41.11%) mothers and after 6 months by 31(7.89%) mothers. A significantly large number of literate mothers (43/77,55.84%) exclusively breastfed their babies for 6 months than the illiterate mothers (99/307,32.24%) ( $p=0.0002$ ). The practice of exclusive breast feeding was not significantly different between the mothers who had undergone home deliveries and hospital deliveries. Out of the 131 mothers who were informed about feeding by the health personnel, 94 had breastfed their babies and out of the 253 who were not informed, 48 had breastfed their babies, which was statistically significant ( $p=0.0001$ ) [Table/Fig-1 & 2].

Practices checked	Number	Percentage (%)
Time of initiation of breast feeding		
Within 1 hour	125	32.56
Within 8 hours	130	33.88
Within 24 hours	107	27.96
Others	22	5.59
Practice of colostrums		
Yes	82	21.38
No	302	78.61
Practices of prelacteal feeds		
Yes	302	78.61
No	82	21.38
Practices of exclusive breast feeding for 6 months		
Yes	142	36.84
No	242	63.15
Time of introduction of complimentary feeds		
6 months	158	41.11
<6 months	195	50.91
>6 months	31	7.89
Sources of knowledge regarding feeding		
Advice by elder	253	65.78
Advice by health personnel	131	34.22

**[Table/Fig- 1]:** Infant feeding practices checked (n=384)

	EBF	Not EBF	Total
Mother literate	43	34	77
Mother illiterate	99	208	307
	142	242	384
p=0.0002 (extremely significant) by Fisher's exact test			
	EBF	Not EBF	Total
Home delivery	21	45	66
Hospital delivery	121	197	318
	142	242	384
p=0.4011(not significant) by Fisher's exact test			
	EBF	Not EBF	Total
Informed by Health personnel	94	37	131
Not informed by Health personnel	48	205	253
	142	242	384
p < 0.0001 (extremely significant) by Fisher's exact test			

**[Table/Fig- 2]:** Relationship between feeding practices & certain variables

EBF- exclusive breast feeding

## DISCUSSION

The urban population is rapidly expanding because of the large-scale migration of people to the cities and it is projected that more than half of the Indian population will live in urban areas by 2020 and that nearly one third of this urban population would have been slum dwellers previously [6]. The ongoing process of rapid urbanization has deleterious repercussions on the health and the nutrition, especially in children. Inappropriate infant feeding practices is one of the important causes of malnutrition as has been reported by a study [5]. In our study, 94.41% of the mothers had started

breastfeeding within 24 hours after their deliveries, which was more than that in the previously reported data [7]. As had been reported earlier [8,9], colostrum was given by 21.3% mothers in our study. As compared to that in other studies [9,10], a higher proportion of the mothers (78.6%) had given prelacteal feeds in our study. Fifty two point fifty percent mothers had exclusive breastfed their babies for 6 months in our study, which was more than that in the previously reported data [7,8]. However, a recent study [11] found that it was 35.2% in an urban slum of Delhi. Complimentary feeds were started by 41.11% mothers at 6 months in our study, which was less than that in other studies [7,10]. As was reported by Roy [7], 34.22% of the mothers had been informed about breast feeding by the health personnel and one study [8] found that only 3.85% of the mothers had been informed. The practice of exclusive breast feeding was more in literate mothers (statistically significant), mothers who had undergone hospital delivery and in those mothers who were informed about breast feeding by the health personnel (statistically significant). So, the adherence to the correct feeding practices can be increased by promoting the education of the mothers, by promoting hospital deliveries and by imparting health education.

## CONCLUSION

Inappropriate feeding practices like the late initiation of breast feeding, rejecting colostrum, giving prelacteal feeds, not exclusively breastfeeding for the first 6 months and the delayed initiation of complimentary feeds, are common in the urban slums of Nagpur, Maharashtra, India. The practice of exclusive breast feeding was more in the literate mothers and in the mothers who had been informed about breast feeding by the health personnel.

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**FINANCIAL OR OTHER COMPETING INTERESTS:**

None.

Date of Submission: [May 31, 2012](#)

Date of Peer Review: [Jun 28, 2012](#)

Date of Acceptance: [Aug 26, 2012](#)

Date of Publishing: [Nov 15, 2012](#)