

Practices of Breastfeeding and Weaning Practices among Mothers of Children Up To 2 Years of Age

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ABSTRACT:

Objectives:

- To assess the current practices of mothers regarding breastfeeding and weaning of their children up to 2 years of age attending Pediatrics OPD in Gauhati Medical College and Hospital, Guwahati.
- To compare the knowledge, attitude and practices of mothers with respect to educational status.

Design: Cross sectional study

Setting: OPD of a tertiary care hospital.

Participants: 536 mothers of children upto 2 years of age.

Methods: 536 mothers of children aged upto 2 years were randomly selected from those attending the OPD. Relevant data were recorded in a proforma to be filled by interviewers. All the selected mothers were interviewed personally and information about their practice of breastfeeding and weaning was noted on a pretested proforma consisting of 37 items with subheading multiple choices in English. The questions were asked in local language and were duly explained in case of any difficulty in understanding or misinterpretation.

Results: Out of the 536 mothers 114 were illiterates, 104 studied upto primary school, 166 upto class X, 152 were matriculate and above. 80.2% of the mothers initiated breastfeeding within one hour of birth and 64.3% of them continued exclusive breastfeeding till 6 months of age. It was seen that that mothers with higher education initiated breast feeding significantly earlier than that of mothers with lower education. The most common reason of early weaning was hungry/ crying baby whereas that of delayed weaning was ignorance of mothers. Exclusive breast feeding upto completed 6 months was seen in 65% of the mothers. It was seen that 73.9% continued breastfeeding beyond first 6 months. Early initiation and timely weaning was significant associated with level of education of the mothers.

Conclusion: The present study shows a high percentage of mothers initiating breast feeding within one hour of delivery and exclusive breast feeding for six or more months. A clear association between level of maternal education and exclusive breast feeding and proper weaning is also seen. Breast feeding promotion strategies should be continued with the same vigour with long-term approaches to prioritizing education for women and girls should be explored.

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I. Introduction

India contributes to 18 % of the world's population and nearly one-fifth of the total live births. India also contributes to the global burden of newborn and infant deaths in a very high proportion. India contributes to 27% of total newborn mortality in the world¹. According to recent Sample registration system data infant mortality rate (IMR) in India was 40 per 1000 live birth². It is well known that breastfeeding influences a child's health positively and improves nutritional status^{3,4, 5}. A meta-analysis from three developing countries showed that infants who were not breastfed had a 6fold greater risk of dying from infectious diseases within the first 2 months of life than those who were breastfed.⁶ Six months of exclusive breastfeeding and continued breastfeeding in first year of life could also prevent 1.3 million child deaths worldwide according to systematic reviews from the Bellagio Child Survival Study Group.⁷ The millennium development goal target IMR of 28 per 1000 live births. Data indicates that India will need one decade to achieve that target⁸. One of the major underlying causes of infant and neonatal mortality might be the inadequate or discriminatory care practices prevalent in the society. The key care practices during infancy which has long term implications in survival of the infant are early initiation of breast feeding, exclusive breast feeding, timely and adequate complementary feeding^{9,10}. Early initiation and exclusive breast feeding for first six months of age are now recognized interventions for survival of the infant. Together with optimal weaning practices contributes to proper growth

and development of the child¹¹. In India the mother's knowledge of child care is influenced by traditions, customs, rituals and taboos. With change in time there is a lot of positive change in this knowledge of childcare but still in many cases there is inadequate knowledge among mothers about these practices needed for optimal care of the newborn and the infant which contribute to high infant mortality and morbidity¹². It has been seen that the mothers practices is influenced by her level of education and not just by the literacy level as a whole¹³. It is the need of the hour to not only focus on the literacy of female but also the level of education and specific health information regarding breastfeeding and weaning practices.

II. Methods

This was a cross-sectional study conducted in the OPD of a tertiary care hospital of Guwahati. 536 mothers of children up to 2 years of age were enrolled in the study which was conducted over a period of one year June 2015 to July 2016. Informed consent was taken from each mother. Data collection was done by questionnaires and personal interviews. Information related to infant feeding practices namely initiation of breastfeeding, colostrum feeding, pre lacteal feeding, and exclusive breastfeeding practice, complementary feeding were noted. Also the socio demographic data were collected from the mothers. Ethical clearance was obtained from the Medical College Ethics committee.

Inclusion criteria

All mothers who gave informed consent to be part of the study and they have children who were in the age group up to 2 years of age.

Exclusion criteria

Those mothers who did not give informed consent, infants who were suffering from some congenital or systemic diseases.

Statistical analysis The data collected on various aspect of the study were completed, tabulated and subjected to statistical analysis. Data analytical procedures involved frequency distribution cross tabulation and chi square test. The statistical analysis was done using MS Excel 2010 software and SPSS 17.0 software. P value < 0.05 was considered to be statistically significant.

III. Results

On analysis of socio demographic profiles of the mothers (Table 1) it was observed that majority of mothers (77.6%) belong to the age group 19-30 age group. While 6.7% of mothers were teenage mothers, 15.7% of mothers were above 30 years. Hindu mothers constituted 73.5% of the sample, 23.9% mothers were Muslims and 2.6% were Christian. It was also observed that 21.2 % of the mothers were illiterates, 19.4% were educated up to primary school, 31% up to class X and 28.4% were matriculate and above. Most of the mothers hailed from a urban area (58%) whereas 42% of them were from rural area.

Table 1: Socio-demographic characteristics

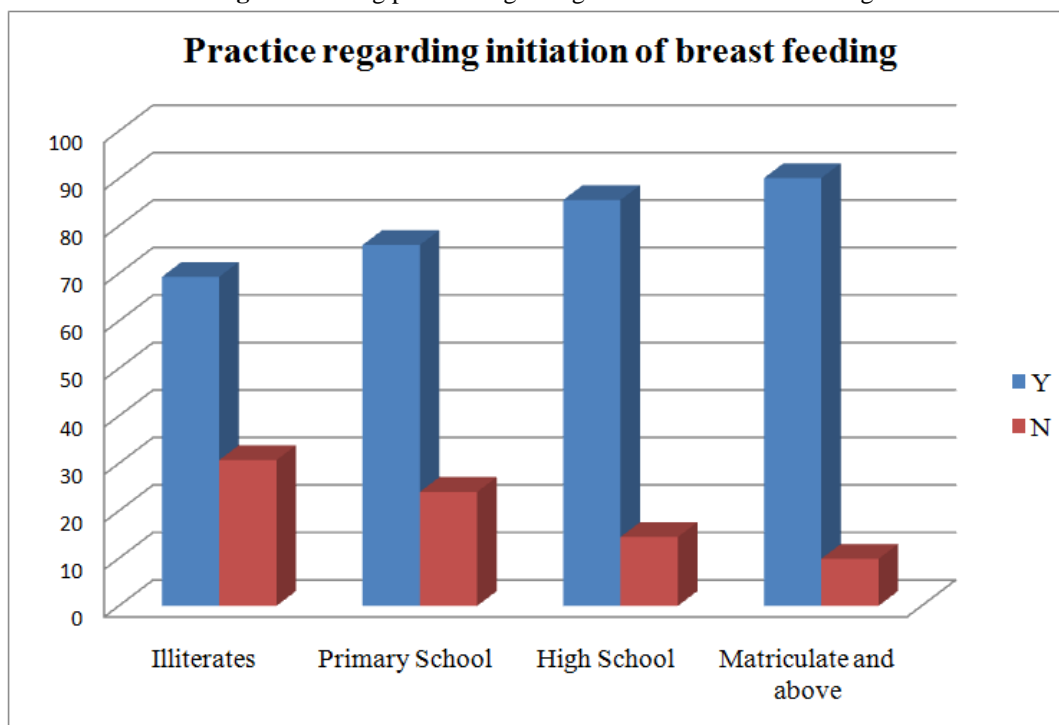
Variable	Number	Percentage
Age of the mother		
<19 years	36	6.71%
19-30 years	416	77.62%
>30 years	84	15.67%
Educational Status(Mother)		
Illiterate	114	21.27%
Up to primary school(Class IV)	104	19.40%
Up to class X	166	30.97%
Matriculate and above	152	28.36%
Religion		
Hindu	394	73.51%
Islam	128	23.88%
Christian	14	2.61%
Place of Residence		
Urban	311	58.02%
Rural	225	41.98%

Table 2 showed that majority of the mothers (81.5%) initiated breast feeding within one hour of delivery. However it was also seen that 90% of the above matriculate mothers initiated breast feeding within one hour of delivery compared to 69% of the illiterate mothers. It was observed that as the level of education increased the mothers initiating breast feeding within one of delivery also increased gradually. This finding was statistically significant.

Table 2: Practice regarding initiation of breast feeding

Item	Illiterate (%)	Primary school (%)	High school (%)	Above matriculation (%)	Total	P value
Within 1 hour	79 (69.3)	79 (76)	142 (85.5)	137 (90.1)	437 (81.5)	<0.0001
More than 1 hour	35 (30.7)	25 (24)	24 (14.5)	15 (9.9)	99 (18.5)	

Fig 1 : Showing practice regarding initiation of breast feeding

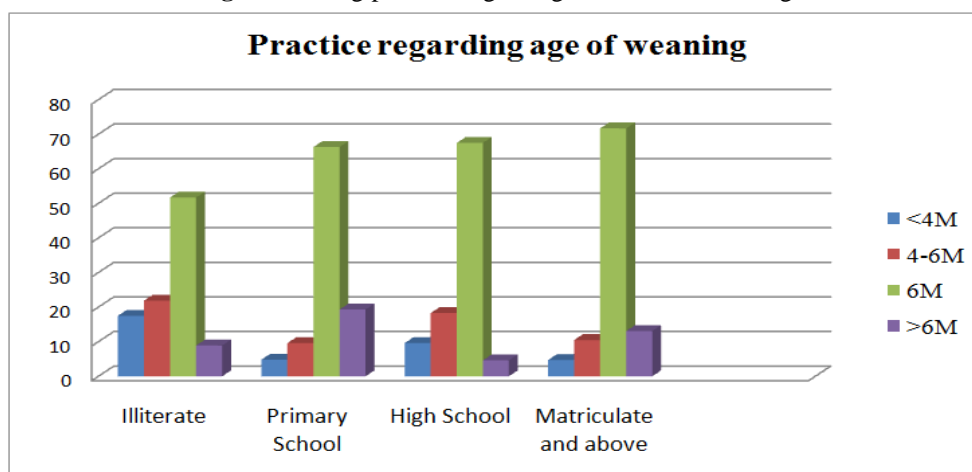


65% of the mothers initiated weaning after 6 completed months of age. In this practice also a similar result where mothers with higher education initiated weaning at the correct age compared to their less educated counterparts. It was also seen that 21% of the mothers initiated weaning before 6 months of age. The most common reason cited was child's demand (76%) followed by sick mother (14%). The most common cause of delayed weaning was ignorance of the mothers (44%) followed by poor socio economic status (29%).

Table 3: Practice regarding initiation of weaning

Age Of Introduction Of Weaning	Illiterate (%)	Primary school (%)	High school (%)	Above matriculation (%)	Total (%)	P value
<4M	20 (17.5)	5 (4.8)	10 (9.6)	7 (4.7)	42 (8)	<0.0001
4-6M	25 (21.9)	10 (9.6)	19 (18.3)	16 (10.5)	70 (13)	
6M	59 (51.7)	69 (66.3)	112 (67.5)	109 (71.7)	349 (65)	
>6M	10 (8.9)	20 (19.3)	25 (4.6)	20 (13.1)	75 (14)	

Fig 2: Showing practice regarding initiation of weaning



It was also observed in our study that most of the mothers (74%) continued breast feeding beyond 6 months of age. But this finding was not influenced by the level of education in fact it was seen that slightly more illiterate mothers continued breast feeding beyond 6 months. It was also seen that that 65% of matriculate and above mothers used commercially available foods for their children compared to 51% of the illiterate mothers.

IV. Discussion

In the present study it was found that 81.5% of the mothers initiated breast feeding within our hour of delivery. It was better than the 78% found by NRHM in 2014¹. The study finding was above the national average of 40.5% as found by District level Household survey Round 3 (DLHS 3)¹⁴. The present study is similar to a study by Kalitaet al¹⁵ where 70.5% of the mothers initiated breastfeeding within one hour of delivery. However it was in contrast with a study done by Kakati et al where they found that only 56% of the mothers initiated breastfeeding one hour of delivery¹⁶. In our study we found a significant association between the level of education of the initiation of breast feeding after delivery where above 90% of matriculate and above mothers initiated breast feeding within one hour of delivery. This is similar to a study done in Nepal where they found that mothers with higher education initiated breast feeding earlier¹⁷. Percentage of women practicing exclusive breast feeding for first six months was found to be 65% in this study. In AHS 2012-13 the percentage of women practicing exclusive breast feeding for six months was found to be 40% in Assam, according to DLHS 3 and NFHS 3 the percentage was 46% in the national level^{14,18,19}. In a study Medhi GK et al exclusive breast feeding rate of 69% was observed similar to our finding of 65%²⁰. Another study in Delhi showed that exclusive breast feeding was done by 57.0% mothers for children less than 6 months of age²¹. While Joseph N et al in their study found that 41.7% mothers exclusively breastfed (EBF) their infants for 6 months²².

The study observed that majority of mothers (65%) introduced complementary feeding at the correct time while 14% mothers introduced complementary feeding lately and 21% introduced complementary food before six months. Similar to our study observations Kalitaet al¹⁵ found that 49% of the mothers started weaning at completed 6 months of age. Basnet S et al found that 50% of the mothers started complementary feeds at 6 months of age²³. In a study by Rao S et al 77.5% mothers were found to have started complementary feeding at the recommended time²⁴. But a study by Kavitha S et al found that 62% of infants were weaned prematurely²⁵.

In the study it came to light that among the mothers who started weaning prematurely, mother's perception of insufficient breast milk and child's demand was the most important cause. Whereas mother's ignorance was found to be the most common cause for late introduction of complementary feeds. Similar results were obtained by Taneja DK et al and Mahmood SE et al in studies conducted in rural settings. Medhi GK et al also observed late introduction of complementary feeding among the infants in Assam^{20, 26,27}. Ulak M et al also reported that 79% infants were introduced to complementary food before six months of age and the main reason was assumed insufficient breast milk production²⁸. Holambe VM et al observed in their study that late introduction of complementary food was associated with maternal age, education and parity²⁹.

V. Conclusion

Although the present study made it evident that almost half of the mothers had proper knowledge and practiced ideal infant feeding. This observation was better than most parts of our country. However, it was a far cry from the situation in developed countries. This study highlights the importance of maternal educational status in infant feeding practices. There was a clear association of proper feeding practice with not just the

literacy of the mothers but also with the level of education of the mothers. Breast feeding promotion strategies should be continued with the same vigour with long-term approaches to prioritizing education for women and girls should be explored.

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