

ORIGINAL ARTICLE

BREAST FEEDING PRACTICE IN A SELECTED PERI URBAN AREA OF BANGLADESH

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Abstract:

Background: Exclusive breastfeeding (EBF) offers optimum growth and development up to first six month of life. In Bangladesh, 55% of children less than 6 months of age are exclusively breastfed according to BDHS 2014. The aim of the study is to assess the exclusive breast feeding practice and associated factors among children in peri-urban area of Bangladesh. **Methods:** This is a cross sectional observational study conducted at Jhalkuri under Narayanganj districts during the period of July to December 2014. Total 109 mothers having infants aged 6-12 months interviewed and included in this study. **Results:** It was found that only 26(24%) mother went for regular antenatal checkup and remaining 83 (76%) had irregular antenatal check up. But none of them got breastfeeding advice during antenatal visit. Knowledge about breast milk as first food in 44(40%) mother. Mother informed to breast feeding exclusively upto six months only 53 (48%). Breastfeeding was initiated within 1 hour of birth in 42(39%) cases and 67 (61%) cases after 1 hour of birth. Exclusive breastfeeding (EBF) was found in 43 (40%) children. Among them 34 (79%) were children of housewife mothers. Mixed feeding (breast milk plus formula/ cow's milk) was given to 52 children among them 25 (49%) were the children of housewife mothers. Only formula milk was given to 14 children of them 5(35%) were the children of housewife mothers. Exclusive breast milk was not given by 26(39%) mothers due to job or other occupation whereas 40(61%) mother did not give EBF due to insufficient breast milk. **Conclusion:** In the study rate of exclusive breast feeding was 40%. This is lower compare to national level. This study also showed that frequency of exclusive breast feeding practice was lower in working mothers than housewife mothers. This study also showed that the speculation of not getting sufficient milk was one of the main reasons for not giving exclusive breastfeeding.

Keywords: Exclusive breast feeding, antenatal

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Introduction:

Breast feeding is the fundamental component of child nutrition and survival¹. Breast milk is the perfect food alone up to six months of age¹ and contributes significantly to the child's nutrition up to 2 years of life². The nutrients of the breast milk are present in proper balance and are provided in bioavailable and easily digestible forms². According to WHO exclusive breastfeeding means that the infant only

receives breast milk without any additional food or drink, not even water³. Exclusive and sustained breast feeding provides nutritional and immunological support for normal growth and development⁴. Exclusively breast feeding children are nutritionally better than the children who are not breast fed⁵. Breast feeding can improve child health situation by reducing major killer diseases of children⁶. Exclusive breast feeding reduces infant mortality due to common

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childhood illnesses such as diarrhoea or pneumonia, and helps for a quicker recovery during illness⁶. Studies have demonstrated that it reduces deaths in infants and young children⁷. EBF coverage has been estimated to avert 13%–15% of deaths among children under five years of age especially in middle and low earning settings⁸. Suboptimum breastfeeding was responsible for 11.6% of all child deaths in 2011⁴. Till today, globally less than 25 % mother practice exclusive breast feeding (EBF) for six months⁴ and globally only half of infants under 1 month of age and 30% of infants aged 1–5 months are exclusively breastfed⁴. In South- East Asia region exclusive breast feeding rate is 23.4% up to six months in India, it is 37% in Nepal, 67% in Srilanka³. However, according to BDHS 2014 exclusive breastfeeding rate is 55%. World Health Organization (WHO) recommended that an able mother should practice and maintain exclusive breastfeeding for first six months of her infant's life^{9,10}. A recent study conducted on the prevalence of EBF in a rural sub-district in Bangladesh which showed a significantly lower prevalence of EBF (36%)¹¹ than the national figure (55%)¹².

Bangladesh has long been thought to have a breast feeding culture and cited for its good breast feeding practices till the mid eighties¹³. But erosion has taken place in breastfeeding practices with the result of increased malnutrition in rural areas along with disastrous consequences on the health and wellbeing of children^{14,15}. With the advancement of some knowledge regarding breastfeeding, practice not changing with time^{14,15}. This study was undertaken to look into the knowledge, attitude and practices of mother on breastfeeding practices in a selected peri-urban area of Narayanganj district.

Methods:

This is a cross sectional observational study conducted at Jhalkuri under Narayanganj districts during the period of July to December 2014. Total 109 mothers having infants aged 6-12 months interviewed and included in this study. All mothers were interviewed after obtaining informed written consent. Predesigned structured pretested questionnaire were used for data collection. Sick children requiring emergency care, irritable children and mothers who were unwilling to participate, were excluded from the study. Information's for initiation of breast feeding and exclusive breast feeding were elicited by historic recall. This study considering different variables of breast milk secretion, initiation

of breast milk, pre-lacteal feeding, exclusive breast feeding at six completed months etc. To understand the belief and barriers on BF, focal group discussion (FGD) was arranged with mothers.

Results:

Table-I
Age distribution of mothers (n-109)

Age of mothers	Numbers	Percentage (%)
16-20 years	23	21.2%
21-30 years	69	63.3%
31& above	17	15.5%
Mean (SD)	24.5 year	100%

Table-II
Socio-Demographic pattern of study

Age of child	Number	Percent (%)
(06-12 months)	109	100%
Sex		
Male	67	61.46%
Female	42	38.53%
Mother's education		
Primary	49	44.95%
Secondary	29	26.61%
Higher	11	10.1%
Illiterate	20	18.34%
Father's education		
Primary	41	37.61%
Secondary	42	38.53%
Higher	17	15.6%
Illiterate	09	8.26%
Antenatal visit		
Regular	26	23.85%
Irregular/No visit	83	76.14%
Breast feeding education (BF)	00	
Mode of delivery		
Normal vaginal delivery	62	56.88%
Caesarean section	47	43.11%
Mother's occupation		
House wife mother	69	63.3%
Working mother	40	36.7%

Table – III
Selected breast feeding practice indicators among mothers

Variables: (6-12) months old babies N =109 (Mean age: 7.85 month)	Percentage(%)	Number
Rate of exclusive BF at 6 months of age	39.44%	43
Initiation of BF within 1 hour after delivery	38.53%	42
Knowledge about breast milk as first food	40.36%	44
Pre-lacteal feeding	59.63%	65
Mother informed to breast feeding exclusively	48.6%	53

In Table-III The rate of exclusive breastfeeding at 6 month of age was found 39.44%. Although a significant proportion of mothers (38.53) started breastfeeding within one hour. In this area breast milk as a first food knew only 40.36%. The rate of prelacteal feeding was 59.63%. However, mother informed breastfeeding exclusively was 48.6%.

Table IV
Feeding pattern up to six months old infants

Pattern	Frequency	Percent
Initiation of breast feeding		
<1 hour	42	38.53%
>1 hour	67	61.47%
Exclusive breast feeding	43	39.44%
BM + cow's milk /formula (mixed feeding)	52	47.7%
Formula milk	14	12.84%

Table-IV shows that 38.53% mothers were started breastfeeding within one hour. Exclusive breastfeeding was found 39.44%, mixed feeding 47.7% and 12.84% only formula milk.

Table-V
Early initiation (<1hr) of breast feeding in relation to mode of delivery and mother's education.

Variables	Frequency	Percent (%)
Mode of delivery		
Normal vaginal delivery(62)	32	51.61%
Caesarean section (47)	10	21.27%
Educational status		
Primary (39)	14	35.89%
Secondary (37)	13	35.13%
Higher (14)	10	71.42%
Illiterate (19)	5	26.31%

In Table:V Relation between early initiation of breast feeding and mode of delivery was found that early initiation of breastfeeding was more common in infants delivered by normal vaginal delivery 32(51.61%) out of 62 whereas only 10(21.27%) out of 47 infants had early initiation of breastfeeding delivered by caesarian section. Regarding mothers education it was found that 10(71.42%) mothers with higher education initiated breast feeding within 1hr. (Table – V).

Table—VI
Breast feeding status among children of housewife mothers and working mother.

Variables	House wife	Working mother	Total
Exclusive breast feeding up to 6 months	34(79.1%)	9(20.9%)	43
BM + cow's milk /formula (mixed feeding)	25(48.1%)	27(51.9%)	52
Formula milk	5(35.71%)	9(64.28%)	14

In Table: VI Rate of exclusive breastfeeding was higher 34 (79.1%) in children of housewife mother than children of working mothers which was 9 (20.9%). Here the rate of mixed feeding was 25(48.1%) in the children of housewife mother and 27 (51.9%) was children of working mother. Formula feeding was given in 5(35.71%) children of housewife mother and 9(64.28%) children of working mother. (Table -VI).

Discussion:

Exclusive breastfeeding (EBF) practice during the first six months of infant's life is the most effective intervention for providing balanced nutrition and for the prevention of child mortality and morbidity⁷. But it has not yet been universally practiced and reduction in the rate of EBF is taken as a serious problem, especially in developing country.¹¹ In this study, we observed that the overall prevalence of EBF practice among Bangladeshi mothers was 39.44%. The rate of EBF practice was lower in this study than the BDHS report 2016 which showed an overall EBF rate of 55% in Bangladesh¹². The prevalence of EBF in Bangladesh according to this study was higher than that reported in some other countries such as Egypt (9.7%)¹⁷, India (Tamil Nadu, 34%)¹⁸ and the USA (16.8%)¹⁹. However, the prevalence of EBF was found higher in some other parts of the world such as Malaysia (Peninsular, 43.1%)¹⁶, Arbaminch Southern Ethiopia (46.5%)²¹, Bahir Dar city of Northwest Ethiopia (50.3%)²¹, Western India (61.5%)²² and the Goba district of South East Ethiopia (71.3%)²¹. The variations persisting in EBF rate in different regions worldwide might be due to cultural, economic and socio-demographic differences across areas. Besides, all the countries probably are not focusing on enhancing the EBF rate with the same intensity which may also contribute to the discrepancy. In present study prevalence of EBF is lower compare to national level¹². This might be one of the reasons why prevalence of EBF is lower in our study, lack of support from family members, lack of advice from health staff during ANC and delivery. The other possible reasons for the variation in EBF practice found in different studies may be the different methods used for measuring EBF. In this study, recall method was used for assessing EBF. In Bangladesh, the trend of practicing EBF among the lactating mothers remained mostly unchanged for a long time. According to the Bangladesh Demographic and Health Surveys (BDHS) report, the prevalence of EBF was nearly 45% in 1993–94 and 1999–2000^{23,24}, 42% in 2004²⁵ and 43% in 2007²⁶. The prevalence of EBF markedly increased to 64% in the BDHS report in 2011²⁷ which further declined to (55%) in the recent report of BDHS in 2014¹².

Children are more likely to receive prelacteal feeds when they are born at home and when the birth is

not assisted by a health professionals¹⁶. Over the years there has been a decline in the prevalence of prelacteal feeding at national level 62% in 2007²³ and 39% in 2011²⁰. In our study prelacteal feeding is 60%. This unexpected finding could be explained as the fact that most of the mothers in Bangladesh are till now used to giving birth to their babies in home with the help of midwives.

Mean age of children in month was 7.84 months range (6 – 12 months). Among them 67 (61.5%) were male and 42 (34.5%) were female. Regarding antenatal follow up of mother, only 26(24%) mother went for regular follow up and remaining 83(76%) had irregular antenatal check up. This finding was consistent with the study done by Vafae A et al.¹³ They showed that regular antenatal visit was 18.2%, Irregular visit was 67.8% and no visit was 14%. In the present study it was shown that, breastfeeding was initiated with in 1 hour of birth in 42(38.5%) mothers and after 1 hour of birth in 67(61.5%) mothers which was not consistent with the findings conducted by Chakraborty Bet al¹⁴ where they found that breastfeeding was initiated with in 1 hour of birth in 68.5% of the study children (0-23 months). But it was consistent with a study by Akhtar et al.⁹ Our study showed that early initiation of breastfeeding was more common in infants delivered by normal vaginal delivery 32(51.6%) than the infants delivered by caesarian section 10 (21.2%). This finding was similar with the study done by Chakraborty B et al,¹⁴ where they found that, early initiation of breastfeeding was common in infants delivered by normal vaginal delivery(72%) than infants delivered by caesarian section (68.2%).

In this study exclusive breastfeeding was found in 43 (39.4%) children upto 6 months of age. Breast milk + formula/ cow's milk was given in 52 (47.7%) children. Only formula milk was given in 14(12.8%) children. This finding was similar with the finding conducted by Chakraborty B et al¹⁴ where 66.8% of 0- 6month old children were found to be exclusively breastfed.

In present study rate of exclusive breastfeeding was higher 34 (79%) among the children of housewife mothers than children of working mothers which was 9 (21%). This study was consistent with the study done by Chakraborty et al¹⁴ where the rate of exclusive breastfeeding was found higher (77%) among the children of housewife mothers than those of working mothers (23%).

Conclusion :

In the study rate of exclusive breast feeding was 40%. This is lower compare to national level. This study also showed that frequency of exclusive breast feeding

practice was lower in working mothers than housewife mothers. This study also revealed a number of socio-demographic factors were independently and significantly associated with EBF practice in Bangladesh. Interventions that need to be considered to improve EBF practice include increasing media coverage regarding the awareness programs of breastfeeding, establishing breastfeeding-friendly working environment for working mothers and work-site day care centers for infants, establishing maternal health clinics and health extension programs throughout the country so that more number of pregnant women and mothers can receive appropriate health services, strengthening infant feeding counseling both at the community and institutional levels, discouraging home delivery. Initiatives should be taken for the proper execution of the recommended interventions which would be able to significantly increase the EBF practice among mothers in Bangladesh

Conflict of Interest:

The author stated that there is no conflict of interest in this study

Funding:

No specific funding was received for this study.

Ethical consideration:

The study was conducted after approval from the ethical review committee. The confidentiality and anonymity of the study participants were maintained

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