



Original Article

Assessment of Difficulties in Breastfeeding in Infants below 6 months of Age

Sultana S¹, Sufian A², Rahman SB³, Hossain S⁴, Kabir F⁵, Das J⁶

Abstract

Background: Breast milk is very much essential for proper growth, development and wellbeing of children. They should be breastfed within 1 hour of birth, exclusively breastfed for first six months of life. Breastfeeding difficulties are common. Maternal, infant and social factors are involved in establishment of proper breastfeeding. **Objective:** To find out the difficulties that a mother face during breastfeeding. **Methodology:** Cross-sectional observational study was carried out Shaheed Suhrawardy Medical College & Hospital (Sh.S.MCH). All children upto 6 months of age and their mother attending in OPD, Breast feeding corner and pediatrics indoor of Sh.S.MCH during study period. **Results:** Total 19 (38%) infants had difficulty in breast feeding related to maternal factors. Majority (63%) of mother complained of not enough milk, but urine output of infants was ≥ 6 times within 24 hours in 7 infants of these mothers. Three mothers had stopped breast feeding due to sickness. Total 25 (50%) infants had difficulty in breast feeding related to infant factors. Majority 17 (68%) of them were crying babies, but urine output was ≥ 6 times in 24 hours in 12 of these infants. Refusal of breast was found in 6 (24%) infants, sickness was cause for stopping breastfeeding found in 2 (8%) infants. Total 13 (26%) infants had difficulty in breast feeding related to social factors. Majority 8 (67%) were working mother and 5 (33%) mothers said that there was lack of familial support. **Conclusion:** Most of the mothers initiated breast feeding 1 hour after birth. Most of the mothers had given honey as prelacteal feeding to their infants. Most of them were on partial breast feeding. Sixty five percent infants were given formula milk. Difficulties in breast feeding were related to infant factors and maternal factors mostly. More than one factor was present in some infant.

Key words: Breastfeeding difficulties, Infants

Received: September 09, 2021; **Accepted:** October 11, 2021

Introduction

Breast milk is very much essential for proper growth, development and wellbeing of children. Early initiation of breastfeeding, within one hour of birth, protects the newborn from acquiring infections and reduces newborn mortality. The risk of mortality due to diarrhoea and other infections can increase in infants who are either partially breastfed or not breastfed at all¹.

Breastfeeding (BF) plays a substantial role in improving nutrition, education, maternal & child health and survival. Optimal BF practices during the early years of life have been recognized for many decades as one of the most cost-effective interventions in reducing infant and child morbidity and mortality globally². Practicing Exclusive Breast Feeding (EBF) for six months might be difficult for mothers, particularly in Low and Lower-Middle Income Countries including Bangladesh where maternal malnutrition is common³. Besides lack of information on benefits of EBF practice, inadequate

assistance to mother in the workplace and insufficient support provided by the healthcare system contributes to discontinue breastfeeding before the recommended duration of six months⁴. Moreover, evidence shows that several socio-demographic factors play critical roles in practicing EBF among women in Low and Lower-Middle Income Countries. Studies conducted in Bangladesh, Brazil and Malaysia found that factors like lower maternal age, lower level of schooling and lower-income status were positively associated with the lower rate of EBF practice^{5,6}.

Breast milk is a unique combination of nutrients essential to a child's health. It provides a number of health advantages beginning at birth and continuing throughout a child's life. A large number of the health problems today's children face might be decreased or even prevented by breastfeeding. Many studies showed that breastfeeding strengthens the immune system^{4,5,6}. During nursing, the mother

¹ Dr. Shamima Sultana, Indoor Medical Officer, Department of Pediatrics, Dhaka Medical College & Hospital, Dhaka, Bangladesh.

² Dr. Abu Sufian, Assistant Professor, Department of Pediatrics, Eastern Medical College & Hospital, Cumilla, Bangladesh.

³ Dr. Saida Binte Rahman, Assistant Professor, Department of Pediatrics, Mugda Medical College & Hospital, Dhaka, Bangladesh.

⁴ Dr. Salma Hossain, Assistant Professor, Department of Pediatrics, Ashiyon Medical College & Hospital, Dhaka, Bangladesh.

⁵ Dr. Farzana Kabir, Junior Consultant, Department of Pediatrics, Dhaka Medical College & Hospital, Dhaka, Bangladesh.

⁶ Dr. Joyshree Das, Lecturer, Department of Pharmacology, Dhaka Medical College, Dhaka, Bangladesh.

Address of Correspondence: Dr. Shamima Sultana, Indoor Medical Officer, Department of Pediatrics, Dhaka Medical College & Hospital, Dhaka, Bangladesh. Mobile: +8801718762595, Email: smasufian1987@gmail.com

passes antibodies to the child which helps the child resist diseases like respiratory illness, diarrheal disease, ear infections, allergic reaction⁶.

Materials & Methods

This cross-sectional observational study was carried out in Shaheed Suhrawardy Medical Collage & Hospital (Sh.S.MCH) Dhaka, Bangladesh. All children upto 6 months of age and their mother attending in OPD, Breast feeding corner and paediatric indoor of Sh.S.MCH during study period. After taking informed consent detailed history about breastfeeding difficulty was recorded. Relevant examination of both mother and baby also was conducted and recorded. A structured questionnaire was used for recording relevant data for each mother and baby pair. After collection, data editing and analysis was done by SPSS version 23.

Results

The cross-sectional study was carried out in infant up to 6 months of age and mother attending in OPD and breastfeeding corner and paediatric indoor of Sh.S.MCH with difficulty in breast feeding. Fifty samples of mother & baby were included who had difficulties of breastfeeding related to maternal, infant and social factors.

Table-I: Distribution of mother by the socio-demographic characteristics

Socio-demographic Characters	n (%)
Age (Years)	
≤ 20	11 (22.0)
21-25	18 (36.0)
26-30	16 (32.0)
≥ 31	5 (10.0)
Education of mother	
Illiterate	16 (32.0)
Class I-V	15 (30.0)
Class VI-X and above	19 (38.0)
Occupation	
House wife	42 (84.0)
Service holder	8 (16.0)
Residence	
Rural	38 (76.0)
Urban	12 (24.0)
Monthly income	
3,001-7,000	24 (48.0)
7,001-12,000	21 (42.0)
>12,000	5 (10.0)
Type of family	
Single family	33 (66.0)
Joint family	17 (34.0)

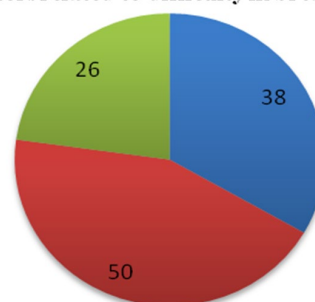
Table-I showed the demographic characteristics of the mothers. Most of the mothers (68%) were between 21-30 years of age. Sixty-eight percent mother were literate. Majority of the mothers (84%) were house wife, rest (16%) were service holders. Majority respondent came from rural area (76%).

Majority of infants (66%) came from single family. More than half (58%) of infants were 3-6 months age group, majority (64%) were male baby, most of the infants (84%) were delivered at >37 weeks of gestation. Majority (68%) of baby's birth weight was ≥2500 gm (Table-II).

Table-II: Distribution of infants by demographic characteristics

Demographic Characters	n (%)
Age	
<1 month	2 (4.0)
1-3 months	19 (38.0)
3-6 months	29 (58.0)
Sex	
Male	32 (64.0)
Female	18 (36.0)
Gestational age	
>37 weeks	42 (84.0)
<37 weeks	8 (16.0)
Birth weight	
≥2500 gm	34 (68.0)
<2500 gm	16 (32.0)

Factors related to difficulty in breastfeeding



■ Maternal factors ■ Infant factors ■ Social factors

Figure-1: Percent distribution of mother and infant by factors related to difficulty in breastfeeding.

Figure-1 showed 50% difficulties in breast feeding were related to infant factors, 38% were maternal factors and 26% were social factors. More than one factor was present in some infant. Total 19 (38%) infants had difficulty in breast feeding related to maternal factors. Majority (63%) of mother complained of not enough milk, but urine output of infants was ≥6 times within 24 hours in 7 infants of these mothers. Three mothers had stopped breast feeding due to sickness like psychosis, epilepsy and valvular heart disease. Total 25 (50%) infants had difficulty in breast feeding related to infant factors. Majority 17 (68%) of them were crying babies, but urine output was ≥6 times in 24 hours in 12 (71%) of these infants. Refusal of breast was found in 6 (24%) infants, sickness was cause for stopping breastfeeding found in 2 (8%) infants. Total 13 (26%) infants had difficulty in breast feeding related to social factors. Majority 8 (67%) were working mother and 5 (33%) mothers said that there was lack of familial support (Table-III).

Table-III: Distribution of infants by difficulties of breastfeeding due to maternal factors

Maternal factors (n=19)	n (%)
Not enough milk	12 (63.16)
Urine output ≥ 6 times/day of infants during exclusive breast feeding (n=12)	07 (58.0)
Urine output < 6 times/day of infants during exclusive breast feeding (n=12)	05 (42.0)
Cracked nipple	02 (11.0)
Flat or Inverted Nipple	02 (11.0)
Mother's sickness	03 (16.0)
Infant factors (n=25)	n (%)
Crying Babies	16 (32.0)
Urine output ≥ 6 times within 24 hours during exclusive breast feeding (n=17)	12 (71.0)
Urine output < 6 times within 24 hours during exclusive breast feeding (n=17)	5 (29.0)
Refusal of breast	6 (24.0)
Position & attachment problems	4 (67.0)
Baby confused by bottle feeds	2 (33.0)
Baby's sickness	2 (33.0)
Social factors (n=13)	n (%)
Lack of familial support	5 (33.3)
Working mother	8 (66.7)

Discussion

In present study most of the mothers (68%) were between 21-30 years of age. Sixty-eight percent mother were literate. Majority of the mothers (84%) were house wife and came from rural area (76%). Majority of infant (66%) came from single family. In Joshi study Mothers' age ranged from 16 to 40 years with a mean of 25 ± 5.2 years, 44% mothers lived in a single family and were literate (78%). About 94% of the mothers were house wife. That result is similar to this study^{7,8}. In comparison with another study that reported the mean age of the mothers was 23 years⁹. Nearly 84% of the total mothers were formally educated (primary or above) and not engaged with any formal jobs (85%).

In current study we observed that total 19 (38%) infants had difficulty in breast feeding related to maternal factors. Majority (63%) of mother complained of not enough milk, but urine output of infants was ≥ 6 times within 24 hours in 7 infants of these mothers. Three mothers had stopped breast feeding due to sickness like psychosis, epilepsy and valvular heart disease. Total 25 (50%) infants had difficulty in breast feeding related to infant factors. Majority 17 (68%) of them were crying babies, but urine output was ≥ 6 times in 24 hours in 12 (71%) of these infants. Refusal of breast was found in 6 (24%) infants, sickness was cause for stopping breastfeeding found in 2 (8%) infants. Dharel et al. reported one fifth (113/574) of mothers perceived

that their milk secretion was not adequate for their baby. Nearly two-thirds of the mothers (64.6%) reported having at least one breastfeeding problem at some point in the first 6 months of age (one of: perceived inadequate secretion of breast milk, engorged breasts, inverted nipple or cracked nipple)⁹. Karaçam Z and Sağlık study observed lack of knowledge and experience about breastfeeding/need for education and support (17.8%)¹⁰. The perception of not having enough milk, infant's failure to thrive and mastitis are well-known factors acting negatively on breastfeeding¹¹⁻¹³. Gianni et al. also reported that the evaluation by a health care professional was rated as important only in 29% to 51% of cases whereas the maternal perception of inadequate milk or insufficient milk supply was cited as important by 40% up to 99% of mothers through the six months' study duration¹⁴.

Present study showed that total 13 (26%) infants had difficulty in breast feeding related to social factors. Majority 8 (67%) were working mother and 5 (33%) mothers said that there was lack of familial support. Gianni et al reported that 17 mothers had returned to work was breast feeding related to social factors¹⁴. In a study conducted in Guatemala on determinants of optimal breastfeeding it has been reported that mothers who worked outside the home are less likely to breastfeed exclusively compared to mother who do not work away from home, thus not working outside the home is important predictor of exclusive breast-feeding¹⁵. Additionally Maru Y and Haidaru in their study reported that before infant reaches six months mothers had to leave their babies and go to work to supplement family income due to economic difficulty hence failure to practice exclusive breastfeeding¹⁶. Women also have to deal with several factors such as increased work pressure, travel time and availability of breastfeeding facility in the institution and workplace. As a result all these factors negatively affect mothers' behaviors towards practicing EBF¹⁷⁻¹⁸. Aligned with other developing countries private sectors including industrial and manufacturing companies are the place of 67% women's job which are do not cater favorable environment for mothers to breastfeed their children¹⁹⁻²⁰. Among the above factors, most of them can be solved with proper care and counseling. This study assessed that most of the factors related to difficulties in breastfeeding are preventable. Proper antenatal care with intensive advice and help regarding breast feeding can ensure establishment and continuation of exclusive breastfeeding for first six months. This suggests a need to strengthen counseling services, where mothers will be taught ways of preventing breast problems.

Conclusion

Our findings provide further insight into breastfeeding difficulties experienced by mothers through the first three months after delivery in a

high-income country with a positive breastfeeding culture and attitude. Difficulties in breast feeding were related to infant, maternal and social factors. Careful modification of these factor can improve the difficulties of breastfeeding.

References

1. Wu Q, Huang Y, Helena van Velthoven M, et al. Feasibility of using WeChat to improve infant and young child feeding in rural areas in China: A mixed quantitative and qualitative study. *PLoS One*. 2021; 16 (2): e0246942.
2. Chiejina EN, Anieche JE, Odira CC. Breastfeeding practices of postnatal mothers: Exclusivity, Frequency and Duration. *Int J Environ Agric Biotech*. 2017; 2 (4): 238821.
3. Sumon MNK. Differentials and Determinants of Early Marriage and Child Bearing: A study of the Northern Region of Bangladesh. *Int j sci Footpr*. 2014; 2 (1): 52-65.
4. Khan MN, Islam MM. Effect of exclusive breastfeeding on selected adverse health and nutritional outcomes a nationally representative study. *BMC Public Health*. 2017;17(1):889.
5. Mazumder MS, Hossain MK. Duration of breastfeeding and its determinants in Bangladesh. *Int J Nat Sci*. 2012; 2 (2): 49-53.
6. Vieira TO, Vieira GO, de Oliveira NF, et al. Duration of exclusive breastfeeding in a Brazilian population: new determinants in a cohort study. *BMC pregnancy and childbirth*. 2014; 14 (1): 175.
7. Joshi PC, Angdembe MR, Das SK, et al. Prevalence of exclusive breastfeeding and associated factors among mothers in rural Bangladesh: a cross-sectional study. *Int Breastfeed J*. 2014; 9 (7): 2-8.
8. Rahman MA, Khan MN, Akter S, et al. Determinants of exclusive breastfeeding practice in Bangladesh: Evidence from nationally representative survey data. *Plos one*. 2020; 15 (7): e0236080.
9. Dharel D, Dhungana R, Basnet S, et al. Breastfeeding practices within the first six months of age in mid-western and eastern regions of Nepal: a health facility-based cross-sectional study. *BMC Pregnancy Childbirth*. 2020; 20 (1): 59.
10. Karaçam Z, Sağlık M. Breastfeeding problems and interventions performed on problems: systematic review based on studies made in Turkey. *Turk Pediatri Ars*. 2018;53(3):134-48.
11. Odom EC, Li R, Scanlon KS, et al. Reasons for earlier than desired cessation of breastfeeding. *Pediatrics*. 2013; 131(3): e726-32.
12. Li R, Fein SB, Chen J, et al. Why mothers stop breastfeeding: mothers' self-reported reasons for stopping during the first year. *Pediatrics*. 2008; 122: S69-76.
13. Brown CR, Dodds L, Legge A, et al. Factors influencing the reasons why mothers stop breastfeeding. *Can J Public Health*. 2014; 105 (3): e179-85.
14. Gianni ML, Bettinelli ME, Manfra P, et al. Breastfeeding difficulties and risk for early breastfeeding cessation. *Nutrients*. 2019; 11 (10): 2266.
15. Dearden K, Altaye M, De Maza L, et al. Determinants of optimal breast-feeding in Peri-urban Guatemala City, Guatemala. *Rev Panam Salud Publica*. 2002; 12(3): 185-192.
16. Maru Y, Haidar J. Infant feeding practice of HIV positive mothers and its determinants in selected health institutions of Addis Ababa, Ethiopia. *Ethiop J Health Dev*. 2009; 23 (2): 107-14.
17. Tanakam T, Takahashi K, Otsuka K. Increasing female education, stagnating female labor force participation, and gains from marriage: The case of rural Bangladesh. *Nat Grad Inst Policy Stud*. 2020; 19-34.
18. Afrose L, Banu B, Ahmed KR, et al. Factors associated with knowledge about breastfeeding among female garment workers in Dhaka city. 2012; 1 (3): 249-55.
19. Hossain M, Islam A, Kamarul T, et al. Exclusive breastfeeding practice during first six months of an infant's life in Bangladesh: a country based cross-sectional study. *BMC Pediatr*. 2018; 18 (1): 93.
20. Balogun OO, Dagvadorj A, Anigo KM, et al. Factors influencing breastfeeding exclusivity during the first 6 months of life in developing countries: a quantitative and qualitative systematic review. *Matern Child Nutr*. 2015; 11 (4): 433-51.

Citation of this article

Sultana S, Sufian A, Rahman SB, Hossain S, Kabir F, Das J. Assessment of Difficulties in Breastfeeding in Infants below 6 months of Age. *Eastern Med Coll J*. 2022; 7 (1): 11-14.