

Constraints of Exclusive Breastfeeding Practice among Breastfeeding Mothers of Dhaka Slums

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Abstract

Breastfeeding is the unique source of nutrition and it plays an important role in the growth, development and survival of the infants. The initiation of breastfeeding within one hour and continuation of only breast milk up to six months ensure maximum benefits. The prevalence of exclusive breastfeeding in Bangladesh is 64% which is low. Particularly, in slum areas the practice of exclusive breastfeeding among breastfeeding mothers are not being adopted with importance. This cross sectional study was conducted to study the factors influencing noncompliance to exclusive breastfeeding in selected slums of Dhaka city from 1 July 2016 to 10 April 2017 among conveniently selected 354 infant (0-12 months)-mother pairs. Exclusive breastfeeding was found in 27.2% cases. About one-quarter mothers intended to exclusively breastfeed their babies up to 4 months of age followed by 34.7% up to 5 months of age and 39.7% up to 6 months of age. Constraints to exclusive breastfeeding practice by the mothers were baby continued to be hungry even after breastfeeding, so they preferred giving other foods rather than practicing exclusive breastfeeding (17.4%), mothers suffered from maternal health problems and could not continue to breastfeed their babies (29.3%), mothers expressed a psychology of fear that the infant might become addicted to breast milk (14.7%), mothers explained about pain in their breasts (23.9%), mothers were forced by their mothers-in-law to wean the baby earlier (37.8%), mothers were not making enough breast milk to satisfy their babies (33.9%), mothers returned to their works earlier for earning money and could not get time to breastfed (39.9%), lack of husband's support (29.4%), breastfeeding was so tiring (18.3%), peer group pressure (38.7%), babies refused breast milk (19.5%), weakness and dizziness during breastfeeding (31.2%) and babies were not getting enough weight (28.9%). Due to caesarian birth and occurrence of jaundice during birth 28.4% and 15.2% mother did not breastfeed. The present study reveals some important factors contributing to low rate of exclusive breastfeeding in Bangladesh.

Keywords: Exclusive breastfeeding; Slum; Constraints

Introduction

Breastfeeding is the first fundamental right of the child. The initiation of breastfeeding and the timely introduction of adequate, safe and appropriate complementary foods in conjunction with continued breastfeeding are of prime importance for the growth, development, health and nutrition of infants and children everywhere. Breastfeeding benefits for newborns and infants are well-documented [1]. Breastfeeding provides infants with superior nutritional content that is capable of improving infant immunity and possible reduction in future health care spending [2]. Evidence shows that early initiation can prevent 22% of all deaths among babies below one month in developing countries [3]. Studies have shown that breastfed infants do better on intelligence and behavior tests in adulthood than formula-fed babies [4]. Evidence found an association between early cessation of breastfeeding and postnatal depression in mothers [5]. Regardless of these benefits, much variation is found among cultures in the onset of breastfeeding. Cultural attitudes about the acceptability of colostrum are one important component that affects a mother's decision about when to begin breastfeeding. In many countries, the reinforcement of a «breastfeeding culture» and its vigorous defense against incursions of a «formula-feeding culture» is imperative. Many mothers neither exclusively breastfeed for the first six months of the baby's life nor continue breastfeeding for the recommended two years or more and instead replace breast milk with commercial breastmilk substitutes or other milks [6]. The major problems are the societal and commercial pressure to stop breastfeeding, including aggressive marketing and promotion by formula producers. These pressures are too often worsened by inaccurate medical advice

from health workers who lack proper skills and training in breastfeeding support [7]. Lack of support and lack of knowledge base among health care providers concerning appropriate breastfeeding practices can affect the breastfeeding initiation and duration rates as the majority of the health care providers used their own breastfeeding experiences to replace evidence-based knowledge for breastfeeding mothers [8]. Bangladesh is a developing country. But many factors such as malnutrition, high illiteracy rate, ignorance, superstition, political violence and natural disaster are the main handicaps to our development. Among these, malnutrition is one of the most important barriers to our national progress. The rate of early initiation of breastfeeding is still low in Bangladesh. There are many reasons which are responsible for the delay start of early initiation of two infants. This study was done through extracting the reasons behind the delay or reluctance for the practice of exclusive breastfeeding among purposively selected breastfeeding mothers of fur selected slums of Dhaka City to know the present situation of early initiation of breastfeeding and find out the factors hindering the exclusive breastfeeding practice.

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Methodology

This study was a descriptive cross-sectional study. This study was conducted among 150 breastfeeding mothers of slums (Begunbari Slum Area, Karail Slum Area, Lalbagh Slum Area and Kallyanpur Slum Area) of Dhaka City. The study was conducted from 1 June 2016 to 10 May 2017. The time preceding and following this period was utilized for questionnaire development, data entry and analysis and final presentation of the study. Those mothers whose children were about 0-12 months of age and mothers living in the selected slums of Dhaka City were included in the study. The sample was conveniently selected. A questionnaire was developed containing both closed and open ended questions to obtain relevant information on socioeconomic, educational, anthropometric and health condition. All questions were designed, pretested, modified and resettled to obtain and record information easily. The purpose of the pretest was to test the content, wording and expression, the typical sequence of questions and the duration of the interview and the reliability of some items. After pre-test, the individual questionnaire which was related for quantitative data collection were improved and reformed to ensure content coverage, the reliability and validity of the study. The part of the questionnaire that was designed to obtain socioeconomic information was collected by interviewing the respondents. All the respondents were interviewed about personal characteristics and their monthly income, family size, economical condition, educational information, housing conditions, living conditions. All of the information's were recorded in the respective places of the questionnaire. Data analysis was carried out with the aid of IBM Statistical Package for the Social Sciences (SPSS) version 21.00.

Results

Table 1 represented that among 250 infants 3.5% infants age were between 1-3 months, 30% infants age were between 4-6 months, 55.5 infants age were between 7-10 months and 11% infants age were between 11-12 months. Out of 120 mothers, 35.6% mothers' age were between 15-20 yrs and 40.3% mothers' age between 21-25 yrs, 24.1 mothers ages were between 26-30 yrs and there were none above 30 yrs of age who were considered as breastfeeding mothers. According to order of birth, 48.9% mothers were with their first baby, 3.7% were interviewed with their second baby, 11.2% were respondents with their third babies and 2.9% were with their fourth babies (Table 1).

The education level of mothers was also checked. 13% of the mothers were found illiterate, 2.2% stated that they could read and write but never attended school, 45.6% were in the group of class one to class five, 35% of mothers were in the group of class six to class ten, while 4.2% of the mothers attended education above class ten standard. Fathers' educational levels were also noted down throughout the survey. 12% of fathers were illiterate, 3.5% could read and write but never attended any academic schooling, 41.3% fell into the group class one to class five, 33.9% were in the group between class six to class 10 and only 9.3% were found to be attended educational standard from class ten and above. 71.1% of the respondent breastfeeding mothers were found as housewives where 11.8% were garment workers and continued working even during the exclusive breastfeeding period, 9.3% were observed to be working as maids in various households of Dhaka city and 7.8% were involved in other chores like knitting, brick building etc. 15.2% fathers were day laborer, 18.2% fathers' occupation was shop keeping, 23.1% fathers worked in garment factories while 14.1% fathers' income source was driving, 24% fathers were rickshaw pullers and 5.3% worked as sweeper, carpenter, guard and hawker etc (Table 2).

More than half (52%) families' monthly incomes were between 2000 taka to 5000 taka (25 USD to 62.5 USD), 44% family claimed to have monthly incomes are between 6000 taka to 10000 taka (75 USD to 125 USD). And 4% mother told about their family income above 10,000 BDT (>125 USD) (Figure 1).

Table 3 represented the rate of early initiation of breastfeeding. It showed that 44% infant started breastfeeding within one hour and 56% started more than one hour (Table 3).

Table 4 represents mothers' information of knowledge, practice and behavior towards breastfeeding practice. 45.6% mothers stated that

Variables	Percentage (%)
Age of infants (in month)	
1-3 month	3.5
4-6 month	30.0
7- 10 month	55.5
11-12month	11.0
Age of mothers (in year)	
15-20 yr	35.6
21-25 yr	40.3
26-30 yr	24.1
31-35 yr	0.0
>35 yr	0.0
Birth order of infants	
Percentage (%)	
1 st	48.9
2 nd	37.0
3 rd	11.2
4 th	2.9
5 ^h	0.0

Table 1: Age distribution of infants (in month) and mothers (in year) and birth order of infants (n=354).

Education of mother	Percentage (%)
Illiterate	13.0
Can read and write but never gone to school	2.2
Class 1 through Class 5	45.6
Class 6 through Class 10	35.0
Class 10 and above	4.2
Education of father	
Percentage (%)	
Illiterate	12.0
Can read and write but never gone to School	3.5
Class 1 through Class 5	41.3
Class 6 through Class 10	33.9
Class 10 and above	9.3
Occupation of mother	
Percentage (%)	
Housewife	71.1
Garments worker	11.8
Working as maid in households	9.
Others (knitting, brick building)	7.8
Occupation of father	
Percentage (%)	
Day laborer	15.3
Shopkeeper	18.2
Garments worker	23.1
Driver	14.1
Rickshaw puller	24.0
Others (Sweeper, Guard, Peon, Carpenter, Hawker)	5.3

Table 2: Educational background and occupation of parents of infants (n=354).

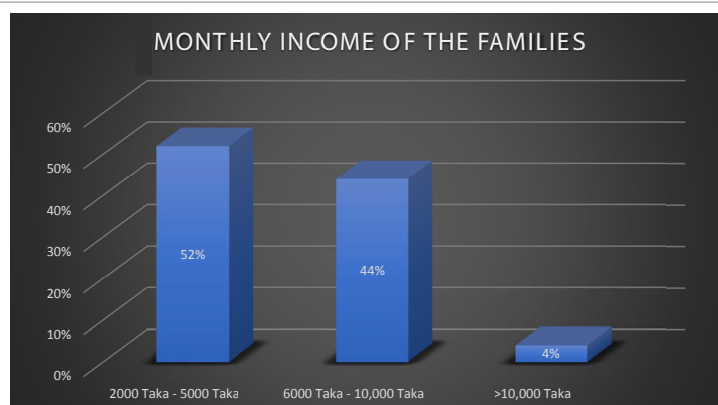


Figure 1: Monthly Income of the families (n=354).

Initiation of breastfeeding after birth	Percentage
Within one hour after birth	44.0
More than one hour after birth	56.0
Total	100.0

Table 3: Early initiation of breastfeeding in infants (n=354).

Variables	Percentage
When did you start to feed your baby?	
Immediately after birth	45.6
Within the first 2 h after birth	27.3
After more than 2 h of birth	15
On the second day after birth	5.2
Cannot remember	6.9
Colostrum received by the baby	
Not at all	14.2
Partially received	51.3
Fully received	34.5
How often do you breastfeed your baby daily?	
<6 to 8 times	67.2
6 to 8 times	13.8
>8 times	12.6
As often as the baby wants	6.4
Length of time for each breastfeeding	
Less than half an hour	36.2
Half an hour	15.3
More than half an hour	14.2
I don't count	22
Breastfeeding when asleep	12.3
Give baby supplement other than milk	
Rarely	35.9
Sometimes	42.8
Most of the time	21.3
Period intended to breastfeed baby exclusively (months)	
0-4 months	25.6
0-5months	34.7
0-6months	39.7

Table 4: Information on breastfeeding (n=354).

they started breastfeeding their babies immediately after birth. 27.3% of the study population said that they initiated breastfeeding within the first 2 hours after birth. 15% mothers started breastfeeding after more than 2 hours of birth. 5.2% mothers started breastfeeding on the second day after birth and 6.9% mothers could not remember the exact

timing of initiation of breastfeeding. It is seen that 14.2% infants did not receive colostrum at all, 51.3% infants partially received colostrum and 34.5% infants fully received the colostrum. 94% mothers claimed that they received information about breastfeeding while 86% said that they perceived adequate information on breastfeeding. 67.2% mothers breastfed their babies <6 to 8 times a day, 13.8% mothers breastfed their babies 6 to 8 times daily. 12.6% mothers breastfed their babies more than 8 times a day. 6.4% mothers said that they fed their babies, according to babies' needs. Analyzing the length of time for each breastfeeding, it was found that 36.2% mothers breastfed their babies for less than half an hour, 15.3% breastfed their babies for half an hour. 14.2% mothers breastfed their babies for more than half an hour. 22% said they did not count the length of breastfeeding and 12.3% claimed they breastfed their babies when the babies were asleep. 35.9% of mothers rarely gave their babies other supplementary foods along with breastfeeding. 42.8% fed their babies supplementary foods sometimes. 21.3% mothers gave supplementary feedings to their babies most of the time. 25.6% mothers intended to exclusively breastfeed their babies up to 4 months of age. 34.7% had intention to breastfeed their babies up to 5 months of age. And only 39.7% mothers exclusively breastfed their babies up to 6 months of age which indicates a great threat to the child growth and development. Table 5 represents the constraints to exclusive breastfeeding practice by the mothers. 17.4% mothers said that baby continued to be hungry even after breastfeeding, so they preferred giving other foods rather than practicing exclusive breastfeeding. 29.3% mothers suffered from maternal health problems and could not continue to breastfeed their babies. 14.7% mothers expressed a psychology of fear that the infant might become addicted to breast milk and so they chose to discontinue the practice. 23.9% mothers explained about pain in their breasts for what they left the practice of exclusive breastfeeding. 37.8% mothers were forced by their mother in laws to wean the baby earlier. 33.9% mothers stated that they were not making enough breast milk to satisfy their babies. 39.9% mothers said they returned to their work earlier for earning money so that could not get them to breastfed their babies. 29.4% claimed that they could not choose exclusive breastfeeding due to lack of husband's support. 18.3% said that breastfeeding was so tiring to them. 38.7% claimed that their neighbors convinced them to wean the baby before 6 months of age. 19.5% mothers said that their babies refused breast milk. 31.2% stated about weakness and dizziness during breastfeeding their babies and 28.9% mothers said that their babies were not getting enough weight which compelled them shifting from exclusive breastfeeding to supplementary feeding. Due to caesarian birth, 28.4% mothers did not breastfed their babies and due to occurrence of jaundice during birth, 15.2% mother did not breastfed their babies.

Constraints to exclusive breastfeeding practice	Percentage
Baby continued to be hungry after feeding	17.4
Maternal health problem	29.3
Fear of infant becoming addicted to breast milk	14.7
Due to pains in my breast	23.9
My mother-law pressured me to wean the baby	37.8
I was not making enough breast milk to satisfy my child	33.9
I returned to work/business	39.9
Lack of husband's support	29.4
Breastfeeding was too tiring	18.3
My neighbors pressured me to wean the baby	38.7
Baby refused breast milk	19.5
I was losing weight	21.7
I feel dizzy at times during breastfeeding	31.2
My baby was not gaining enough weight	28.9
Due to caesarian birth	28.4
Jaundice of baby during birth	15.2

Table 5: Constrains of exclusive breastfeeding (n = 354).

Discussion

Early initiation of breastfeeding is not only essential for the child, but also for mothers as well. It saves infants' lives, creates bonds between mother and child, helps to reduce post-partum hemorrhage and increases breast milk secretion. Unfortunately the rate of early initiation of breast milk practice to infants is still low in our country. This small study explored many interesting underlying significant barriers for early initiation of breastfeeding. It may provide help to policy makers to target these barriers while formulating breastfeeding promotion campaign. Exclusive breastfeeding is the best recommended infant feeding method for the first six months of life and has a protective effect against child morbidity and mortality [9], but it has not yet been universally practiced and the reduction in the rate of the EBF is taken as a serious problem, especially in developing countries. As breastfeeding knowledge is largely dependent on the education and knowledge of the mother, in this thesis study, mother's education is also checked. It was found that nearly half of the respondents (45.6%) were in the group of class one to class five, whereas 35% of mothers were in the group of class six to class ten. This education level is not at all satisfactory because along with breastfeeding practice, other cares for the baby are also dependent on mothers' knowledge and education level. As like mother 41.3% father fell into the group of class one to class five and 33.9% were in the group between class six to class ten. As fathers play a significant role in the family as considered the head of the family, so when his education level is not upgraded, then the caring practice and breastfeeding practice by the mother becomes vulnerable. Judging the occupations of the respondents, two-third (71.1%) of the respondent was found as housewives. Here we can see that around 30% mothers are involved in various work sites which prove that they might return to their work for earning livelihood just after delivery. This causes reluctance in practicing exclusive breastfeeding. As care providers and other vital practices and behavior towards the newborn, including exclusive breastfeeding practice are depend on the family income also. Most of the families had lower income. The income level of the families does not have that much greater impact on mothers' breastfeeding practice but certainly education had. As breastfeeding is quite a cost free service by the mother, income does not have a significant effect on this practice. Non-exclusive breastfeeding practice leads to undernourishment and morbidity. In South Asia, 24%-26% of babies born in Bangladesh, India and Pakistan are breastfed within the first hour of birth, whereas

the corresponding rate for Sri Lanka is 75% [10]. The effect of these breastfeeding patterns is reflected in the neonatal mortality rates for these countries: 40-50 per 1000 live births for Bangladesh, India and Pakistan, while in Sri Lanka the rate is as low as 11 per 1000 live births [11]. The benefits of breastfeeding for the health and well being of the mother and baby are well documented. A recent trial has shown that early initiation of breastfeeding could reduce neonatal mortality by 22%, [11] which would contribute to the achievement of the Millennium Development Goals. In many parts of the world, the rates of early initiation of breastfeeding are extremely low: 17% in Eastern Europe and Central Asian countries and 33% in Asia-Pacific. The highest rates (about 50%) are in Latin America, the Caribbean, East and North Africa. However, for many countries no data are available [12] about half of the respondents (45.6%) started breastfeeding their babies immediately after birth followed by 27.3% within the first 2 hours after birth. There is a big portion; almost half of the total population has not initiated breastfeeding just after birth which is alarming. Half of the infants (51.3%) partially received colostrum and 39.7% mothers exclusively breastfed their babies up to 6 months of age, which indicates a great threat to the child growth and development. The main inquiry of the study was the reason for discontinuation or the constraints of exclusive breastfeeding practice. The baby continued to be hungry even after breastfeeding, maternal health problems, psychology of fear that the infant might become addicted to breast milk, pain in their breasts for what they left the practice of exclusive breastfeeding, peer group pressure, not making enough breast milk, lack of husband's support, weakness and dizziness during breastfeeding were the important causes for discontinuation. Various reasons are being pictured through the survey. Among the reasons, making insufficient breast milk and the reluctance of mothers to breastfeed their babies for being tired after long time working are highlighted. In this study, the sample size was not very large to have inference for large population. Some respondents could not tell about the economic condition of their families exactly. In that case, the approximate information was taken into account based on subsequent secondary questions. Some of the respondents were not very much cooperated and comfortable to expose their problem and about the socio economic condition of the family. Many of those children's (who were interviewed) condition were not very well. Some of them were vomiting, some were having diarrhea and some were suffering from cold and fever. Their parents were worried about their condition all the time. Therefore, it was not so easy to them and invites those mothers for an interview.

Conclusion

This study was done on breastfeeding mothers living slums of Dhaka City to find out the barriers to early initiation of breastfeeding. The study shows that the rate of early initiation of breastfeeding in infants is still low. The study also shows that cesarean delivery, mothers' improper care practice during pregnancy, preterm birth of babies, a poor economic condition of families, lack of nutrition education of mothers, mothers' poor nutritional status, no breast milk production of mothers just after delivery, ignorance about breastfeeding and superstition are the main causes for the delay start of early initiation of breastfeeding to infants. Based on the findings, breastfeeding mothers are faced with multiple challenges as they strive to practice exclusive breastfeeding. Thus, scaling up of exclusive breastfeeding among mothers requires concerted efforts at the macro, meso and micro levels of Dhaka Slums. Reversing the existing brain drain in the health sector will require substantial improvements in working conditions and empowering of healthcare providers to provide improved care. Awareness level needs to be improved by increasing education level of mother.

References

1. Victora CG, Smith PG, Vaughan JP (2012) Evidence for protection by breastfeeding against infant deaths from infectious diseases in Brazil. *Lancet* 2: 319-322.
2. Huttly SRA, Morris SS, Pisani V (2010) Prevention of diarrhoea in young children in developing countries. *Bulletin of World Health Organization* 75: 163-174.
3. World Health Organization (2012) The quantity and quality of breast milk. Report of the WHO collaborative study on breastfeeding. Geneva: World Health Organization.
4. Akaike H (1973) Information theory and an extension of the maximum likelihood principle. In: Petrov BN, Csaki F (ed.) *Second International Symposium on Information Theory*. Budapest: Hungarian Academy of Sciences 268-281.
5. Al-Mazroui MJ, Oyejide CO, Bener A, Cheema MY (1997) Breastfeeding and supplemental feeding for neonates in Al-Ain, United Arab Emirates. *J Trop Pediatr* 43: 304-306.
6. Rogers IS, Emmett PM, Golding J (2012) The incidence and duration of breastfeeding. *Early Hum Dev* 49 Suppl: S45-S74.
7. Katiyar GP, Agarwal DK, Tripathi AM, Agarwal KN (1981) Feeding practices in Varanasi district. *Indian Pediatr* 18: 60-65.
8. Fleischer Michaelsen K, Weaver L, Branca F, Robertson A (2000) Feeding and nutrition of infants and young children: Guidelines for the WHO European region, with emphasis on the former Soviet countries. WHO Regional Publications. European Series 87.
9. Scott JA, Mostyn T (2003) Women's experience of breastfeeding in a bottle-feeding culture. *Journal of Human Lactation* 19: 270-277.
10. Gillie L (2006) Difficulties and discouragement encountered by mother. *J Hum Nutr* 30: 248.
11. Edmond KM, Zandoh C, Quigley MA, Amenga-Etego S, Owusu-Agyei S, et al. (2006) Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics* 2006 117:380-386.
12. Sulaiman AJM, Al-Riyami A, Farid S (2011) Oman Family Health Survey 2005. *J Trop Pediatr* 47 (Suppl I): I-33.