

Exclusive Breastfeeding Knowledge of the Lactating Mothers Attending a Tertiary Care Setting in Northern Bangladesh

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Abstract

Background: In order to ensure the health and well-being of both the mother and the newborn, it is essential for mothers to have knowledge about the practice of exclusive breastfeeding. It is well acknowledged that the practice of exclusive breastfeeding (EBF) during the first six months of a child's life is very important for the child's survival as well as their physical and mental development. It has been established that breastfeeding exclusively has positive effects on a child's continued existence and development, as well as on the health and well-being of the mother. **Objectives:** To assess the knowledge of the lactating mothers attending a tertiary care hospital in Northern Bangladesh. **Methods:** This cross-sectional descriptive study was conducted at the breastfeeding corner of Bogura's Shaheed Ziaur Rahman Medical College Hospital, Bogura, Bangladesh. A total of 300 mothers were selected using purposive sampling. Data were collected through face-to-face interview using a questionnaire. Fisher's exact test was applied to find the association between demographic factors and level of knowledge regarding EBF of the mothers. **Results:** The respondents had a mean monthly family income of 25543 ± 13515 Taka. It was found that 42.3% of the respondents were house wives, 98.3% of the respondents knew EBF is as only intake of breast milk up to 6 months and most (95.3%) knew pre-lactation feeding was unnecessary and harmful to baby. Most respondents (97.7%) considered colostrums as the first vaccine, 99.3% interrupted EBF due to lack of knowledge, 98.3% knew the proper time of weaning, 98.0% knew the importance of breast feeding as a balanced diet and 98.7% considered it easily available. **Conclusion:** Mothers' practice of exclusive breastfeeding needed to be improved despite their satisfactory understanding and willingness. We suggest prioritizing programs that promote exclusive breastfeeding among moms while enhancing their knowledge and attitudes. It is essential to disseminate all practical knowledge regarding breastfeeding to the broader community to improve the existing data.

Key words: Exclusive breastfeeding, lactating mothers, tertiary care hospital, Bangladesh.

Introduction

When and how long a mother breastfeeds her child, whether or not she uses a feeding bottle, whether or not she gives pre-lactation feeds, whether or not she breastfeeds on demand, and other practices are all part of breastfeeding.^{1,2} According to the World Health Organization (WHO), a mother should nurse her child exclusively for the first six months so that the baby can get the full benefits of nursing.^{3,4} Preventing 13–15% of deaths in children under the age of five is possible with sufficient EBF coverage, especially in low- and middle-income nations.⁵ Only forty-four percent of newborns around the world receive breast milk during the first hour after delivery, while forty percent of infants receive exclusive breast feeding for the first six months of their lives.⁶ The prevalence of exclusive breastfeeding (EBF) in Bangladesh rose from 55% in 2014 to 65% in 2017–18.⁷ A newborn's first source of sustenance is typically breast milk, which is produced by the mother. It plays a crucial role in ensuring that children are able to grow and develop normally during the first six months of their lives, and it also assists infants in adjusting to the environment outside of the uterus.⁸ Infants who consume breast milk are less likely to experience digestive issues such as constipation, diarrhea, or stomach discomfort.⁹ Breastfeeding has many positive effects on the mother's and child's health. Several childhood illnesses, such as those affecting the respiratory tract or the middle ear, as well as disorders including diabetes, cancer, and sudden infant death syndrome, are less likely to occur as a result.^{10,11} It is widely recognized that there is a strong correlation between a mother's socio-demographic traits, her level of motivation, and her decision to follow recommended breastfeeding

methods.¹² In order for government plans and interventions to increase the trend of EBF among women with infants 0–6 months old, it is necessary to identify local and regional determinants. Lactating women in Northern Bangladesh were the focus of this study, which sought to assess their EBF knowledge and demographic characteristics related to EBF.

Methods

This cross-sectional descriptive study was conducted at the breastfeeding corner of Bogura's Shaheed Ziaur Rahman Medical College Hospital, Bogura, Bangladesh. All the lactating mothers attending at the breast feeding corner constituted the study population. A total of 300 mothers were selected as sample units purposively in the study. Data were collected through face-to-face interview using a pretested partially structured questionnaire that had been thoroughly vetted beforehand. The questionnaire was designed to record the demographic characteristics of the mothers and their knowledge regarding EBF. Descriptive as well as analytical techniques were applied for data analysis. Fisher's exact test was applied to find the association between demographic factors and level of knowledge regarding EBF of the mothers.

Results

A total of 300 mothers, 162 (54.0%) mothers were <30 years. Mean age of the mothers was 28.99 ± 7.174 years. Forty percent of respondents had a monthly household income of Tk. 3000–16,000, 34.3% mothers had an income of Tk.1500–35,000 per month and 25.7% had an income of less than or equal to fifteen thousand taka per month. The respondents' average monthly household income was $\text{Tk.}25543 \pm 13515$. There were 42.3% housewives, 27.0% service workers,

Table I: knowledge on exclusive breastfeeding & socio-demographic characteristics (n = 300).

Variables	Respondents		Variables	Respondents	
	No.	%		No.	%
Age of the respondents:			Occupation		
<30 years	162	54.0	Service	81	27.0
30-39 years	137	44.3	Business	43	14.3
39+ years	1	1.7	Housewife	127	42.3
$\bar{X} \pm SD = 28.99 \pm 7.174$ years			Others	49	16.3
No. of children:			Monthly family income		
One	125	41.6	Up to BDT 15000	77	25.7
Two	134	44.7	BDT 15001-30000	103	34.3
Three	32	10.7	BDT > 30001	120	40.0
Four +	9	3.0	$\bar{X} \pm SD = BDT 25543 \pm 13515.453$		
Duration of EBF			Knowledge on EBF:		
6 months	295	98.3	Only breast milk up to 6 months	295	98.3
8 months	5	1.7	Others	5	1.7
Water allowed during BF			Time to start EBF		
Yes	11	3.7	Immediately after birth	288	96.0
No	289	96.3	After 6 hours	12	4.0
Necessary of pre lacteal feeding			Importance of feeding colostrums		
Yes	14	4.7	1st vaccine	293	97.7
No	286	95.3	Provide immunity	7	2.3
Mothers interrupt EBF			Knowledge on proper time of weaning		
Service/Work	2	0.7	Yes	295	98.3
Lack of knowledge	298	99.3	No	5	1.7
Importance of breast feeding			Importance of BF		
Balanced diet	294	98.0	Cheep	3	1.0
Easily available & sterile	5	1.7	Sterile	1	0.3
Others	1	0.3	Easily available	296	98.7
Frequency of feeding to the baby			Advantage of breast feeding		
8-10 times	299	99.7	Balanced diet	2	0.7
When baby cry	1	0.3	Easily available, sterile	97	99.0
Main composition of colostrums			clean at normal temperature		
Low carbohydrate	2	0.7	Others	1	0.3
Antibody	298	99.3			

16.3% women in other occupations, and 14.3% business women among the responders. When asked about their understanding of exclusive breastfeeding, 98.3% said they recognized it as breastfeeding during the first six months, while 1.7% said they knew something else. The largest group of respondents (44.7%) had two children, while 41.7% had one, 10.7% had three, and 3.0% had four or more. Although 1.7% of respondents were aware that EBF lasts for 8 months, more than 98.3% recognized that it lasts for 6 months. According to the majority of

respondents (96.3%), water is not allowed with EBF, while 3.7% were unsure. Almost all (96.0%) of the mothers knew the right time to start the EBF i.e. immediately after birth. The vast majority of responders (95.3%) were aware that pre-lactation feeding was unnecessary, whereas only 4.7% thought it was important. Nearly all respondents (97.7%) recognized colostrums' significance as a first vaccination, and only 2.3% were aware of its ability to confer protection. It was determined that 99.3% of the participants interrupted EBF because they didn't know how to do it, while only 0.07% did it because they had to attend to service or work. It was noted that nearly all respondents (98.3%) were aware of when to wean their babies, only 1.7% were unaware of this. While most of the respondents (98.0%) were aware of the value of breast milk as a balanced diet, only 1.7% thought it was easily accessible and sanitary, and 0.3% thought it was something else entirely. The vast majority of respondents (98.7%) ranked the availability of breast milk as very important, while only 1% rated its cost and sterility as low. The vast majority of responders (99.7%) were aware that babies typically need to be fed 8–10 times per day, but just 0.3 percent were aware that this should be done in response to cries. While just 0.7% of people recognized that colostrums were low in carbohydrates, 99.3% knew that they were constituted of antibodies. Nearly all respondents (99.0%) were aware of the benefits of breastfeeding, which were categorized as follows: readily available, sterile clean at normal temperature, a balanced diet (0.7%), and others (0.3%) (Table I).

Table II: Relationship between knowledge on duration of EBF with selected factors.

Variables		Knowledge on duration of EBF		Fisher's-exact test and p value
		6 months	8 months	
Age group	<30 years	158 (97.5)	4 (2.5)	49.46 p < 0.05
	30-39 years	136 (99.1)	1 (0.9)	
	39+ years	1 (100.0)	0 (0.0)	
Age group	Time to start EBF			51.75 p < 0.05
	Immediately after birth			
	After 6 months			
	<30 years	134 (93.4)	19 (6.6)	
	30-39 years	143 (97.2)	3 (4.8)	
Age group	Water allowed during EBF			47.05 p < 0.05
	Yes			
	No			
	<30 years	8 (4.9)	154 (95.1)	
	30-39 years	3 (2.6)	112 (97.4)	
Age group	39+ years	0 (0.0)	23 (100.0)	

Relationship between age group of the lactating mothers was statistically significantly associated with knowledge on duration of EBF, time to start EBF and water allowed during EBF ($p < 0.05$) (Table II).

It was found that most (55.33%) the respondents were from joint or extended family and 44.67% were from nuclear family. It was found that 52.67% of the respondents were from urban area and 47.33% were from rural area.

Discussion

The mean age of the respondents was 28.99 ± 7.174 years. a total of the 397 breastfeeding moms in another study 295 (74.3%) were young adults, with approximately half ($n = 200$) residing in metropolitan areas.¹³ Although a bigger number of the respondents were aged 25-34 years (72.7%), the mean age of the participants was 30.1 ± 5.0 years ($SE \pm 0.3371$).¹⁴ Regarding monthly family income it was observed 40.0%, 34.3% and 25.7% of the respondents had 30001-60000 taka, 15001-30000 taka and up to 15000 taka monthly house hold income respectively. Nearly half of the respondents in the study (45.9%) were unable to provide their monthly

income. Roughly 22.3 percent of the people who filled out the survey said they made between 6,000 and 20,000 rupees (approximately \$28 and \$95 USD) monthly.¹⁴ It was found that 42.3% of the respondents were house wives, 27.0% were in service, 16.3% were in others professions and 14.3% were business women. About 36.4% of those who filled out the survey were housewives, while 15.5% were students and 13.6% were working adults.¹⁴ Regarding knowledge on exclusive breast feeding it was revealed that 98.3% knew it as only breast milk up to 6 months and 1.7% knew others. Highest percentage (44.7%) of the respondents' had 2 children, 41.7% had single child, 10.7% had 3 children and 3.0% had more than 4 children. Approximately two-thirds of the moms in another study had 2-3 children, with the bulk of the children between 4-6 months old (59.9%, $n = 238$).¹³ Over a third of the respondents had 2 children.¹⁴ A good number (98.3%) of the respondents' knew duration of EBF for 6 months and 1.7% knew it as 8 months. Most (96.3%) of the respondents' knew that water did not allow with EBF and 3.7% knew it as yes. The fact that breast milk is the initial nourishment for a baby was known by around 80% of the moms ($n = 321$).¹³ It was revealed that most (96.0%) of the respondents' knew the time to start EBF as immediately after birth and 4.0% knew after 6 hours. Less than half of the respondents (41.4%) were aware that breastfeeding should commence within an hour of delivery.¹⁴ It was found that majority (95.3%) of the respondents' knew that pre lacteal feeding was not necessary and 4.7% considered it as necessary. It was found that majority (97.7%) of the respondents'

considered the importance of colostrums as 1st vaccine and 2.3% knew as provide immunity. It was established that majority (99.3%) of the respondents' interrupted EBF due to lack of knowledge and 0.07% due to service /work. Only a small fraction of mothers (n = 237) and a small fraction of newborns (n = 45) benefited from EBF.¹³ It was recognized that majority (98.3%) of the respondents' knew the proper time of weaning and 1.7% did not know about this. It was discovered that majority (98.0%) of the respondents' knew importance of breast feeding as balanced diet, 1.7% considered as easily available and sterile and 0.3% knew as others. It was found that majorities (98.7%) of the respondents noted as importance because it is breast milk, 1.0% considered as cheap and 0.3% considered as sterile. It was noted that majority (99.7%) of the respondents' knew that frequency of feeding to the baby 8-10 times and 0.3% knew as when baby cry. Of the mothers who participated in the survey, approximately 38.3% (n = 152) did not exclusively breastfeed their children.¹³ It was revealed that majority (99.3%) of the respondents' knew that colostrums composed of antibody and 0.7% knew it as low carbohydrate. It was revealed that majority (99.0%) of the respondents' knew the advantages of breast feeding as easily available, sterile clean at normal temperature, 0.7% knew as balanced diet and 0.3% knew as others.

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