

Sociodemographic Characteristics and Breastfeeding Practices of Urban Women in Dhaka, Bangladesh

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Abstract

A cross-sectional, descriptive study was done in the Department of Community Medicine, National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh, between January and December of 2017, to evaluate the status of the breastfeeding practices among mothers living in urban communities. We interviewed a total of 277 working mothers in Dhaka city, who had at least one child aged between two and three years, based on a pre-tested and semi-structured questionnaire. We collected their sociodemographic and breastfeeding related information. 188(67.9%) were in the 18–30 years age group, followed by 31–40 years age group 68(24.5%, and >40 years age group 21(7.6%). Most of them completed their bachelor degrees 106(38.3%), followed by HSC 66(23.8%), SSC 28(10.1%), masters 27(9.7%), and primary education 26(9.4%). However, 24(8.7%) did not get any formal education. The majority of them were homemakers 236(85.2%), followed by service holders 21(7.6%), housemaids 14(5.1%) and students 6(2.2%). 190(68.6%) lived in nuclear family, while 87(31.4%) lived in joint family. The majority 241(87.0%) of the respondents first fed their babies with breast milk (colostrum), followed by honey 26(9.4%) and misri (sugar) mixed water 7(2.5%). Most of the respondents 223(80.5%) practised exclusive breastfeeding (EBF), i.e., only breast milk up to the age of completed 6 month. Among those who did not practise EBF, 46(16.6%) fed their babies with formula milk powder and 8(2.9%) used dairy milk. Most of the respondents 251(90.6%) continued to breastfeed their babies along with complementary food even after completion of 6 months, while 190(68.6%) continued to breastfeed their babies up to 2 years. Higher rates of EBF were associated with age and occupation ($p < 0.01$); however, no association was observed with education and family type ($p > 0.05$).

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Introduction

Breastfeeding is one of the few health and nutrition initiatives in which lower-income countries are actually closer to achieving the global recommendation to meeting the global recommendation of exclusive breastfeeding for the first six months.¹ Over the last three decades, thousands of maternity facilities across Bangladesh being in adherence to the “ten steps” outlined by the WHO/UNICEF initiative,² have been acting towards considerable advancements in promotion of breastfeeding.² In Bangladesh, government agencies and other stakeholders like Bangladesh Breastfeeding Foundation (BBF) are also working together to ensure the best possible start in life through optimal breastfeeding, appropriate complementary feeding, and comprehensive maternal nutrition.³ Although breastfeeding is commonly initiated in many developing countries, the rates of

exclusive breastfeeding (EBF) for the first six months – during which no other liquids, semi-solids, or solids should be given to infants, except for necessary medications, vitamins, or oral rehydration solutions – remain relatively low.^{1,4} While breastfeeding often

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continues until the child is two years old, several challenges persist, including the early introduction of water or dairy milk (prelacteal feeding), concerns about inadequate milk supply, and interruptions due to work commitments. The World Health Organization (WHO) has set a target to raise exclusive breastfeeding rates to at least 50% by 2025.⁵ Bangladesh still has to make considerable progress to make toward this goal, aiming to elevate national breastfeeding rates to align with global benchmarks and achieve the highest possible standards; additionally, promotion of breastfeeding plays a vital role in supporting the UN's Sustainable Development Goals by 2030, both locally and globally.⁶

The advantages of breastfeeding for infants, mothers, and society as a whole are well documented. However, the initiation and continuation of breastfeeding is shaped by various socio-economic, health related, and personal factors.^{7,8} Data indicates that many women still lack the necessary support – whether in healthcare settings, at home, or in the workplace – where assistance can have the greatest impact.^{2,9} Women are more likely to breastfeed when they receive adequate support, such as individual counseling, group education, assistance during delivery, and access to trained healthcare professionals who can offer lactation support.^{3,9,10} To our knowledge, evidence specific to breastfeeding practices in Bangladesh is still scarce. Hence, this study aims to evaluate the breastfeeding practices of mothers residing in urban Dhaka, Bangladesh.

Methods

A cross-sectional, descriptive study was done in the Department of Community Medicine of the National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh, between January

and December of 2017. We interviewed a total of 277 mothers living in the urban communities of Dhaka, Bangladesh, who had at least one child aged between 2 and 3 years. A convenience sampling method was adopted. We used a pre-tested and semi-structured questionnaire. We collected their sociodemographic data as well as their breastfeeding practices related information. The World Health Organization (WHO) has suggested several indicators of breastfeeding practices to guide in gathering information for measuring and evaluating infant feeding practices. These indicators include the ever breastfed rate, the exclusive breastfeeding rate, the timely complementary feeding rate, the continued breastfeeding rate, and the bottle-feeding rate.¹¹ Accordingly, we assessed breastfeeding practices through questions related to the initiation of breastfeeding, colostrum feeding, breastfeeding information, frequency of breastfeeding, duration of breastfeeding sessions, use of supplements (baby formula and others), and duration of breastfeeding. The questionnaire was pre-tested among 30 working mothers at urban industrialized area of Tongi Thana under Gazipur district to measure understanding, readability, and administration convenience.

Data was collected in the preformed data collection sheet. All the relevant collected data was scrutinized, compiled and coded in MS-Excel, then statistical analysis was done using SPSS Statistics for Windows, version 17.0 (SPSS Inc., Chicago, IL, USA). Categorical variables were expressed in frequencies and percentages. Chi-square test was applied to see the association between variables. A p-value <0.05 was considered as statistically significant. The results are presented in tables. The study was approved by the Institutional Review Board (IRB) of the National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh.

Results

A total of 277 urban women participated in this study. Out of them, 188(67.9%) were in the 18–30 years age group, followed by 31–40 years age group 68(24.5%, and >40 years age group 21(7.6%). Most of them completed their bachelor degrees 106(38.3%), followed by HSC 66(23.8%), SSC 28(10.1%), masters 27(9.7%), and primary education 26(9.4%). However, 24(8.7%) did not get any formal education. The majority of them were homemakers 236(85.2%), followed by service holders 21(7.6%), housemaids 14(5.1%) and students 6(2.2%). 190(68.6%) lived in nuclear family, while 87(31.4%) lived in joint family (Table-I).

Table-I: Sociodemographic characteristics of the study participants (N=277)

Variables	Frequency	Percentage
Age group		
18–30 years	188	67.9
31–40 years	68	24.5
>40 years	21	7.6
Education		
No formal education	24	8.7
Primary	26	9.4
SSC	28	10.1
HSC	66	23.8
Bachelors	106	38.3
Masters	27	9.7
Occupation		
Service holder	21	7.6
Housemaid	14	5.1
Homemaker	236	85.2
Students	6	2.2
Types of family		
Nuclear family	190	68.6
Joint family	87	31.4

The majority 241(87.0%) of the respondents first fed their babies with breast milk (colostrum), followed by honey 26(9.4%), and misri (sugar) mixed water 7(2.5%). Most of the respondents 223(80.5%) practised exclusive breastfeeding (EBF), i.e., only breast milk up to the age of completed 6 month. Among those who did not practise EBF, 46(16.6%) fed their babies with formula milk powder and 8(2.9%) used dairy milk. Most of the respondents 251(90.6%) continued to breastfeed their babies along with complementary food even after completion of 6 months, while 190(68.6%) continued to breastfeed their babies up to 2 years (Table-II). Higher rates of EBF were associated with age and occupation ($p<0.01$); however, no association was observed with education and family type ($p>0.05$) (Table-III).

Table-II: Breastfeeding practices among study participants (N=277)

Variables	Frequency	Percentage
First food the baby was fed after delivery		
Colostrum	241	87.0
Honey	26	9.4
Sugar mixed water	7	2.5
Others	3	1.1
Exclusive breastfeeding (EBF)		
Yes	223	80.5
No	54	19.5
Alternative feeding instead of EBF		
Formula milk powder	46	16.6
Dairy milk	8	2.9
Breastfeeding continued along with complementary feeding after 6 months		
Yes	251	90.6
No	26	9.4
Breastfeeding babies up to 2 years		
Yes	190	68.6
No	87	31.4

Table-III: Factors affecting exclusive breastfeeding practices among study participants (N=277)

Variables	EBF (n=223)	Not EBF (n=54)	p-value
Mothers' age			
18–30 years	159 (84.6%)	29 (15.4%)	<0.01 ^S
31–40 years	55 (80.9%)	13 (19.1%)	
>40 years	9 (42.9%)	12 (57.1%)	
Mothers' education			
No formal education	17 (70.8%)	7 (29.2%)	>0.05 ^{NS}
Primary	20 (76.9%)	6 (23.1%)	
SSC	20 (71.4%)	8 (28.6%)	
HSC	58 (87.9%)	8 (12.1%)	
Bachelors	90 (84.9%)	16 (15.1%)	
Masters	18 (66.7%)	9 (33.3%)	
Mothers' occupation			
Service holder	5 (23.8%)	16 (76.2%)	<0.01 ^S
Housemaid	8 (57.1%)	6 (42.9%)	
Homemaker	208 (88.1%)	28 (11.9%)	
Students	2 (33.3%)	4 (66.7%)	
Types of family			
Nuclear family	161 (84.7%)	29 (15.3%)	>0.05 ^{NS}
Joint family	62 (71.3%)	25 (28.7%)	

p-value reached from Chi-square test; S=significant, NS=not significant.

Discussion

Breastfeeding is often considered as the best practice for maternal and child health – as it is the best source of nutrition for infants (especially up to 6 months) because of its unique combination of nutrients, natural growth factors, and immune-protective properties that support healthy growth, development, and survival as well as it offers some health benefits for the mothers.¹²⁻¹⁴ The World Health Organization

(WHO) identifies early initiation of breastfeeding within the first hour of birth along with exclusive breast feeding (EBF) for six months, and continued breastfeeding up to two years, as optimal feeding practices.^{1,4,5} However, despite its well-established benefits, EBF rates remain low in many low- and middle-income countries (LMICs), where most deaths linked to inadequate breastfeeding occur.¹⁵ Increasing EBF rates is critical to meeting global nutrition targets set by WHO and UNICEF, including at least 50% coverage by 2025,⁴ and 70% by 2030.⁵ Our study revealed that 80.5% of the study participants practised exclusive breastfeeding (EBF), i.e., only breast milk up to completion of 6 months. However, 90.6% continued to breastfeed their babies along with complementary food beyond 6 months, while 68.6% continued to breastfeed their babies up to 2 years. 87% reported colostrum feeding. Bangladesh has a strong culture of breastfeeding.¹⁰ Bangladesh Demographic and Health Survey 2022 reported that only 63% of infants aged <6 months were exclusively breastfed, while 13% of infants aged <2 years were bottle-fed. 88% of children aged 12–15 months were still being breastfed, while 65% of children aged 20–23 months continue breastfeeding. However, the initiation of breastfeeding was delayed, as only 52% put to the breast within one hour of birth.¹⁶ While colostrum feeding improved in the past decade (87%), the traditional practice of giving prelacteal feeds to the newborn was reported in 48% infants.³ A previous study from poor urban areas of southern Brazil showed that the median duration of breast-feeding was 18 weeks, and at 6 months 41% of the infants were continued to be breast-fed.¹⁷ Another study done in Ecuador reported that only 8.1% of women performed EBF for 12 months.¹⁸ In South Asia region, prevalence varies widely – India reported 55% EBF, while EBF in Pakistan, Nepal,

Bhutan and Sri Lanka were found 41.5%, 66.1%, 51.4%, and 70%, respectively;¹⁹⁻²³ all are much lower than that of our result.

In the present study, higher rates of EBF were associated with mothers' age and occupation ($p < 0.01$); however, no association was observed with education and family type ($p > 0.05$). A study done in India found that infants of mothers who were aged ≥ 35 years, more educated, living in urban areas and who had antenatal/natal care were the factors associated with a lower proportion of exclusive breastfeeding at six months of age.²⁴ Another study done in Kenya also observed association of EBF with mother's age and level of education.⁷ However, studies done in Iran and Pakistan found association of EBF with mother's education and job profile, but not with age.^{8,20} Studies from Nepal and Sri Lanka reported a higher EBF prevalence in urban zones than that of rural areas.^{21,23}

Regarding the limitations of this study, it was conducted in the selected urban communities of Dhaka city with a relatively small sample. Moreover, we excluded the rural communities, where breastfeeding practices tend to be different due to the differences in social, economic and cultural contexts. These two factors possibly limit the generalizability of the study findings in whole population. Moreover, we used a cross-sectional design, which hardly determines causal relationship. Last but not the least, during interview process, there was a possibility of recall bias while investigating on the breastfeeding practices of the participants that may limit the accuracy of the findings of this study.

Conclusion

The prevalence of exclusive breast feeding found in our study (80.5%) is much higher than that of the

national figure (63%). Pre-lacteal feeding was not uncommon. These findings suggest that there is a need for breastfeeding support provided by health services. Countrywide breastfeeding promotion programmes should be given special attention to those mothers who are not following proper breastfeeding practices. In other words, behaviour change communication (BCC) promoting optimal breastfeeding practices and addressing the misconceptions that hinder the practice of exclusive breastfeeding should be enhanced.

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