

Original Research Article

Feeding practices among children 6-23 months attending in an outpatient department of a tertiary level hospital in Dhaka

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Received: 15 July 2025

Revised: 14 August 2025

Accepted: 11 September 2025

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ABSTRACT

Background: As malnutrition is not considered a disease, it remains a hidden health problem and quietly steals energy, retards growth and development, and lowers body resistance to infection. This study aimed to assess the feeding practices among children aged 6-23 months attending the outpatient department (OPD).

Methods: This cross-sectional study was conducted among 125 purposively selected mothers having children of 6 months to 2 years of age who attended the outpatient department of Holy Family Red Crescent Hospital. Face-to-face interview was done through questionnaires. Analysis of data was done with SPSS version 21.

Results: Among 125 respondent's majority (66.4%) had their first child at the age of between 18-22 years. Only some of them (35.2%) had antenatal check-ups during pregnancy and most (88.8%) of the mothers did not have postnatal care after the delivery of the last child. Regarding the reason for not taking PNC nearly all (91.0%) did not know PNC. Maximum (56.8%) knew about feeding colostrum after childbirth and most (88.8%) feed colostrum to their child and almost all (95.2%) of them were only breastfeeding their child for six months.

Conclusions: The study highlighted a gap in maternal knowledge regarding antenatal and postnatal checkups, underscoring the need to raise awareness in these areas. However, most mothers demonstrated adequate awareness of proper breastfeeding practices, including colostrum feeding and complementary feeding.

Keywords: Child nutrition, Complementary feeding, Exclusive breastfeeding, Malnutrition

INTRODUCTION

Optimal infant and young child feeding (IYCF) practices are essential for the growth, development, and overall health of children, especially during the critical window of the first 1,000 days of life- from conception to the age of two years. Inadequate feeding practices during this period are linked to increased risks of undernutrition, stunting, micronutrient deficiencies, impaired cognitive development, and increased morbidity and mortality from infectious diseases such as diarrhea and pneumonia.^{1,2} The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life, followed by the introduction of safe and nutritionally

adequate complementary foods along with continued breastfeeding for up to two years or beyond.³ Despite these recommendations, suboptimal feeding practices remain prevalent in many low- and middle-income countries (LMICs), including Bangladesh. According to the Bangladesh Demographic and Health Survey (BDHS) 2017-18, only 42% of children aged 6-23 months receive a minimum acceptable diet, while minimum dietary diversity is achieved in just 28% of this age group.⁴ These statistics reflect a significant gap in achieving optimal feeding practices in the country. Multiple factors influence feeding practices among children, including maternal education, household income, cultural beliefs, access to health services, media exposure, and the nutritional

knowledge of caregivers.⁵⁻⁷ Urban settings, such as Dhaka, present unique challenges. While better access to health care and information is often assumed in urban areas, urban poverty, overcrowded living conditions, and competing economic priorities can adversely affect child-feeding practices.^{8,9} The transitional period between exclusive breastfeeding and family food, generally between 6 and 23 months of age, is particularly critical. During this time, inadequate complementary feeding- either in terms of quality, quantity, or frequency- can result in undernutrition or deficiencies in essential nutrients such as iron, zinc, and vitamin A.¹⁰ A study conducted in urban Bangladesh revealed that less than half of mothers were aware of the correct timing and consistency of complementary food, contributing to malnutrition and poor growth outcomes in children.¹¹ Healthcare facilities, particularly tertiary-level hospitals, offer a valuable setting for assessing and improving feeding practices through direct contact with caregivers. Outpatient departments (OPDs) of tertiary hospitals in Dhaka serve as referral centers for a wide demographic, including low- and middle-income families who may not have regular access to community-based nutrition services. Monitoring feeding practices in such settings can provide insight into prevailing patterns and help design targeted interventions to improve nutritional outcomes in urban children.¹² Furthermore, studies indicate that nutrition counselling during routine health visits can substantially improve caregivers' knowledge and behavior regarding child feeding.¹³ However, the implementation of such counselling in busy OPD settings remains limited in practice. Understanding the existing feeding behaviors and their determinants can help bridge this gap. Given this context, it is imperative to assess the current feeding practices among children aged 6-23 months attending the OPD of a tertiary-level hospital in Dhaka. This study aims to assess the feeding practices among children aged 6-23 months attending the outpatient department (OPD).

METHODS

This cross-sectional study was conducted to assess feeding practices and nutritional status among urban young children in Dhaka. A total of 125 mothers with children aged 6 months to 23 months, who attended the outpatient department (OPD) of Holy Family Red Crescent Medical College Hospital, were purposively selected for participation. Data were collected through face-to-face interviews using a structured questionnaire. The study was carried out over one year, from January 2024 to December 2024. After data collection, responses were entered and analyzed using Statistical Package for Social Sciences (SPSS) version 21. An analysis plan was developed in alignment with the study objectives, and data were examined based on relevant variables such as age, feeding type, dietary diversity, and nutritional status. Mothers were included in the study if they had a child between the ages of 6 and 23 months who was attending the outpatient department (OPD) of the Holy Family Red Crescent Medical College Hospital during the study period and if

the mother was willing to provide informed consent. Participants were excluded if the child had any congenital anomalies or chronic illnesses known to affect feeding or growth, or if the mother refused to participate or was unable to provide reliable information.

RESULTS

Table 1 presents the distribution of children by their sociodemographic characteristics (n=125). Most of the children (57.6%) were aged between 8-16 months, followed by 22.4% who were less than or equal to 8 months old, and 20.0% who were older than 16 months. The gender distribution was nearly equal, with 49.6% boys and 50.4% girls. Regarding monthly family income, 64.0% of families earned ≤20,000 BDT, 31.2% earned between 20,001 and 30,000 BDT, and only 4.8% had income above 30,000 BDT. Family size varied, with 60.8% of families comprising 3 to 5 members, 28.8% having 6 to 8 members, and 10.4% with more than 9 members. In terms of maternal age at marriage, the majority (63.2%) married between 18 to 22 years, 24.8% were married below 18 years, and 12.0% were above 22 years. For pregnancy frequency, 67.2% of the mothers had been pregnant 1-2 times, 24.0% had 3-4 pregnancies, and 8.8% had more than 4 pregnancies.

Table 1: Distribution of the children with their sociodemographic characteristics (n=125).

Sociodemographic characteristics	Frequency (%)
Children age (months)	
Less and equal 8	28 (22.4)
8-16	72 (57.6)
More than 16	25 (20.0)
Gender	
Boy	62 (49.6)
Girl	63 (50.4)
Monthly family income	
Less and equal 20000	80 (64.0)
20001 to 30000	39 (31.2)
More then 30000	6 (4.8)
Members in family	
3 to 5 persons	76 (60.8)
6 to 8 persons	36 (28.8)
more than 9 persons	13 (10.4)
Maternal marriage age (years)	
Below 18	31 (24.8)
18 to 22	79 (63.2)
More than 22	15 (12.0)
Frequency of being pregnant	
1-2 times	84 (67.2)
3-4 times	30 (24.0)
more than 4 times	11 (8.8)

Table 2 illustrates the respondents' knowledge about breastfeeding (n=125). Only 29.8% of mothers reported

receiving postnatal care after their last delivery, while the majority (70.2%) did not. During pregnancy, 42.4% of mothers received advice on breastfeeding, whereas 57.6% did not. Regarding colostrum, 56.8% knew its benefits, and 88.8% reported feeding it to their newborns. A high proportion (95.2%) of mothers practiced exclusive breastfeeding for the first six months. In terms of breastfeeding frequency, 45.6% breastfed their child 10-12 times per day, 29.6% did so on demand, 19.2% fed more than 12 times daily, and 5.6% breastfed 5-7 times. Additionally, 58.4% of mothers knew about complementary feeding, while 41.6% did not.

Table 2: Distribution of the respondents by knowledge about breastfeeding (n=125).

	Frequency (%)
Had postnatal care after last child delivery	
Yes	24 (29.8)
No	101 (70.2)
Having advice about BF during pregnancy	
Yes	53 (42.4)
No	72 (57.6)
Knowing feeding colostrum	
Yes	71 (56.8)
No	54 (43.2)
Feed colostrum	
Yes	111 (88.8)
No	14 (11.2)
Breastfeed exclusively for 6 months.	
Yes	119 (95.2)
No	6 (4.8)
Frequency of breastfeeding per day	
When needed	37 (29.6)
5-7 times	7 (5.6)
10-12 times	57 (45.6)
More than 12 times	24 (19.2)
Knew about complementary feeding	
Yes	73 (58.4)
No	52 (41.6)

Table 3: Distribution of respondents by source of knowledge about feeding colostrum after delivery (n=125).

Source of knowledge	N (%)
Private doctor	9 (7)
Relative	25 (20)
Field worker	26 (21)
Family planning invigilator	5 (4)
Community health provider	20 (16)
Government doctor	9 (7)
Nurse	21 (17)
Media	10 (8)
Total	125 (100)

Table 3 shows the distribution of respondents by their source of knowledge about feeding colostrum after

delivery (n=125). The most common sources were field workers (21%) and relatives (20%), followed by nurses (17%) and community health providers (16%). Media contributed to 8% of the knowledge, while private and government doctors each accounted for 7%. Family planning invigilators were the least cited source, reported by only 4% of respondents.

Table 4: Distribution of the respondents by knowledge about complementary feeding (n=125).

	Frequency (%)
Feeding complimentary food to their child	
Yes	120 (93.2)
No	5 (6.8)
Starting the month of complimentary feeding practice for their child	
Before 6 months	21 (17.5)
At 6 months	87 (72.5)
After 6 months	12 (10.0)
Frequency of complementary feeding practice per day	
Before 6 months	21 (17.5)
At 6 months	87 (72.5)
After 6 months	12 (10.0)
Reasons for not feeding complimentary food to their child	
Economic crisis	3 (60.0)
Don't give importance	2 (40.0)

Table 4 presents the respondents' knowledge and practices related to complementary feeding (n=125). A majority of mothers (93.2%) reported feeding complementary foods to their children, while 6.8% did not. Most respondents (72.5%) began complementary feeding at the recommended age of 6 months, with 17.5% starting before 6 months and 10.0% after 6 months. Among those who did not feed complementary food, economic constraints were the main reason for 60% of mothers, while 40% did not consider it important.

DISCUSSION

The present study explored the feeding practices and knowledge among mothers of children aged 6-23 months attending the outpatient department of a tertiary hospital in Dhaka. Most children were aged between 8 and 16 months, with nearly equal distribution of boys and girls. Similar demographic profiles were observed by Uddin et al, who reported that urban pediatric populations typically consist of more infants in their first year of life due to increased healthcare-seeking behavior among mothers in urban settings.¹⁴ Only 29.8% of mothers in this study received postnatal care after delivery. Haque et al showed that the lack of postnatal care is common in both rural and urban areas of Bangladesh, often due to poor awareness and limited access to services.¹⁵ Furthermore, only 42.4% received advice on breastfeeding during pregnancy. In

comparison, Rahman et al. found that maternal counselling rates were even lower in rural areas, which often results in poor infant feeding outcomes.¹⁶ Despite the gaps in maternal care, the findings showed that 88.8% of mothers fed colostrum to their newborns, and 95.2% practiced exclusive breastfeeding for six months. Sheikh et al also reported high rates of colostrum feeding in urban tertiary hospital settings in Bangladesh, attributing it to better awareness and hospital-level counselling.¹⁷ Likewise, Hasan et al. demonstrated a strong positive association between hospital-based breastfeeding promotion and adherence to exclusive breastfeeding practices.¹⁸ The most common sources of breastfeeding knowledge in this study were field workers (21%), relatives (20%), and nurses (17%). In a similar study, Khatun et al showed that community health workers and informal networks such as family members were the key influencers of maternal knowledge on infant nutrition.¹⁹ Additionally, Sharma et al observed that health education through trained nurses and field-level workers significantly increased breastfeeding initiation and duration among urban mothers.²⁰ Complementary feeding practices were largely appropriate in this study, with 93.2% of mothers reporting that they introduced complementary foods, and 72.5% did so at the recommended age of six months. This finding aligns with the study by Kegne et al, who found that timely complementary feeding was more prevalent among urban mothers with higher levels of education and access to healthcare services.²¹ However, 17.5% of mothers initiated complementary feeding before six months, a practice that can lead to nutritional imbalances and increased risk of infections. Victora et al showed that the early introduction of complementary foods is still prevalent in low- and middle-income countries due to misconceptions and cultural practices.²² Among the small number of mothers (6.8%) who did not provide complementary feeding, 60% cited economic constraints. Heinig et al showed that poverty remains a major barrier to proper infant feeding, especially in low-income urban families.²³ Furthermore, Arimond and Ruel emphasized that food insecurity directly affects the quantity, diversity, and frequency of complementary meals.²⁴ Another important finding was the high frequency of breastfeeding, with 45.6% of mothers feeding their babies 10-12 times daily. Soofi et al showed that frequent breastfeeding is essential for maintaining lactation and ensuring adequate nutrient intake in infants, especially in the first six months of life.²⁵ This suggests that while knowledge may be lacking in some areas, the practice of breastfeeding remains strong in urban health facility users.

The study was conducted in a single hospital with a small sample size. So, the results may not represent the whole community.

CONCLUSION

The study highlighted a gap in maternal knowledge regarding antenatal and postnatal checkups, underscoring the need to raise awareness in these areas. However, most

mothers demonstrated adequate awareness of proper breastfeeding practices, including colostrum feeding and complementary feeding. The findings suggest that the National Breastfeeding Program has been effective in urban hospital settings but should be further strengthened to reach and address community-level needs.

Recommendations

It is recommended that targeted health education and counselling on breastfeeding and complementary feeding be strengthened during both antenatal and postnatal periods. Community health workers, nurses, and media should be utilized more effectively to disseminate accurate information. Additionally, interventions addressing economic barriers- such as nutrition support programs for low-income families- are crucial to improve complementary feeding practices and ensure optimal child nutrition.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Rahman F, Rahman T. Feeding practices among children 6-23 months attending in an outpatient department of a tertiary level hospital in Dhaka. *Int J Res Med Sci* 2025;13:3963-7.