

“Breastfeeding practice in children at the age of 0-24 months: A study in a tertiary care private hospital, Dhaka, Bangladesh”

Dr. Delwar Hossain Mollah¹, Professor Dr. Mohammad Monir Hossain²,
Dr. Md. Tazul Islam³

¹Associate Professor & Head, Department of Paediatrics, Shahabuddin Medical College & Hospital, Gulshan, Dhaka 1212.

²Professor of Neonatal Medicine and Neonatal Intensive Care Unit (NICU), Bangladesh Institute of Child Health (BICH) & Dhaka Shishu (Children) Hospital, Shere-e-Bangla, Nagar, Dhaka, Bangladesh.

³Junior Consultant (Paediatrics), FCPS, 250 Bedded General Hospital, Jamalpur, Bangladesh

Corresponding Author: Dr. Delwar Hossain Mollah

Abstract: Proper breastfeeding practices are effective ways for reducing childhood morbidity and mortality. While many mothers understand the importance of breastfeeding, others are less knowledgeable on the benefits of breastfeeding and weaning. We conducted a cross sectional descriptive study in the outpatient dept. of Shahabuddin Medical college Hospital, Dhaka, Bangladesh during the period from January 2018 to November 2018. Our aim was to evaluate breastfeeding pattern in children at the age of 0-24 months. One hundred (100) mothers were interviewed using a questionnaire which was designed to elicit information on infant feeding practices. Most of the children were in 6-12 months age groups which represent 46.25%. Sex distributions were male dominating and were around 60%. The prevalence of breastfeeding practice found 72% in this study; male babies were also practicing more 39% than female 33%. While only 21% breastfed their children exclusively for the first 6 months, and the mean duration of EBF (exclusive breastfeeding) is 3.25 months. Complementary feeding was more commonly initiated around 4–6 months (65.9%). Despite the fact that 72% of mothers initiate breastfeeding and 19.88% of mothers are found to breastfeed up to 2 years. Factors found to influence infant feeding practices are type of delivery, parity, occupation, education, and breast problems.

Keywords: Breastfeeding, Childhood Morbidity, Mortality

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I. Introduction

The World Health Organization (WHO) recommends that infants be exclusively breastfed for the first six months, followed by breastfeeding along with complementary foods for up to two years of age or beyond¹. Adequate nutrition during infancy and early childhood is essential to ensure the growth, health, and development of children to their full potential². It has been recognized worldwide that breastfeeding is beneficial for both the mother and child, as breast milk is considered the best source of nutrition for an infant³. Exclusive breastfeeding can be defined as a practice whereby the infants receive only breast milk and not even water, other liquids, tea, herbal preparations, or food during the first six months of life, with the exception of vitamins, mineral supplements, or medicines⁴. There is scanty data that give estimation about the proportion of exclusively breastfed infants at risk of specific nutritional deficiencies. Several studies have shown that mothers find it difficult to meet personal goals and to adhere to the expert recommendations for continued and exclusive breastfeeding despite increased rate of initiation⁵. Some of the major factors that affect exclusivity and duration of breastfeeding include breast problems such as sore nipples or mother's perceptions that she is producing inadequate milk^{4,6,7}; societal barriers such as employment and length of maternity leave⁷; inadequate breastfeeding knowledge⁶; lack of familial and societal support; lack of guidance and encouragement from health care professionals^{3,7}. These factors in turn promote the early use of breast milk substitute. When breast milk or infant formula no longer supplies infants with required energy and nutrients to sustain normal growth and optimal health and development, complementary feeding should be introduced⁸. According to the WHO recommendations, the appropriate age at which solids should be introduced is around 6 months⁹ owing to the immaturity of the gastrointestinal tract and the renal system as well as on the neurophysiologic status of the infant¹⁰. Factors that influence the weaning process include infant feeding problems such as refusal to eat, colic, and vomiting among others¹¹. These factors represent challenges for mothers and in turn may either directly or indirectly influence the feeding pattern. Hence, understanding the factors affecting infant nutrition in Mauritius

can help in developing strategies to promote breastfeeding and overcoming problems faced by mothers and children.

II. Objectives

○ **General objective:**

To evaluate breastfeeding pattern in children at the age of 0-24 months in Bangladesh

○ **Specific objectives:**

To evaluate factors associated with breastfeeding in Bangladesh

To find out the reasons for not giving breastfeed to children by mothers

III. Method and Materials

A cross-sectional descriptive study was conducted on a group of 100 mothers during from January 2018 to November 2018 in the outpatient dept. of Shahabuddin Medical College Hospital, Dhaka, Bangladesh to elicit information about infant feeding practices by the use of a properly designed questionnaire given to mothers. This study approved by Medical college authority and consents were obtained from all participants. Using a purposive sampling technique, 100 mothers were selected aged 18–45 years. In addition, the sampling was based on the following inclusion and exclusion criteria. Questionnaire responses were collected and analyzed using SPSS (version 13.0). We analyzed breast-feeding initiation and mode of delivery; association between breastfeeding duration and parity, education, and occupation of respondents.

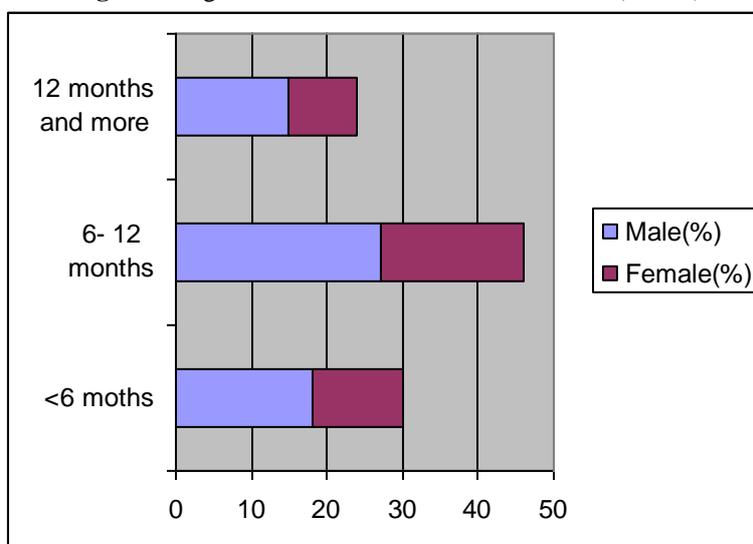
Inclusion Criteria: Mothers who already delivered their baby and those with a child who is below 2 years old were considered in this survey.

Exclusion Criteria: Mothers having a child with any kind of malformations and mothers with children who are above 2 years old.

IV. Results

A total of 100 respondents completed the questionnaire of which 71 were from urban areas and 29 were from rural areas, with 71% mothers having completed at least secondary level education. The age of the participants ranged from 18 to 45 years old whereby the majority of the participants (50%) belonged to the age group 25–31 years and most of them were living in a nuclear family (64%). A total of 93.4% of the mothers acknowledged that they breastfed their infants of which 64.7% stated that they were self-motivated to opt for the natural way of feeding their infant since they were aware of the health benefits of breast milk and claimed that “breast milk is best.” 60.6% of the participants initiated breastfeeding the same day after delivery, while 39.4% started to nurse their baby 24 hours after delivery.

Figure 1: Age and sex distribution of the children (n=100)



Mean \pm SD= 9.63 \pm 11

Table 1: Background characteristics of the respondents and link with associated factors (n=100)

Category	Frequency	Percentage
Mothers Age (Years)		
18–24	15	15
25–31	50	50
32–38	21	21
39–45	14	14
Residence		
Rural	29	29
Urban	71	71
Socio-economic Class		
Poor	26	26
Middle Class	64	64
Upper Class	10	10
Parity		
Primiparous	43	43
Multiparous	57	57
Type of family		
Nuclear	64	64
Extended	36	36
Type of delivery		
Normal vaginal	42	42
Caesarian section	58	58
Ventouse	00	00
Education level		
Primary	7	7
Secondary	71	71
HSC	14	14
Diploma	2	2
Graduated	6	6
Occupation		
Student	14	14
Housewife	61	61
Self-employed	25	25

Table 2: Distribution of breast feeding by age group (n=100)

Age group	Male (%)	Female (%)	Total (%)
<6 months	13	12	25
6-12 months	17	15	32
12 months and more	09	6	15
Total (%)	39	33	72

Figure 2: Distribution of exclusive breast feeding by age group (n=21)

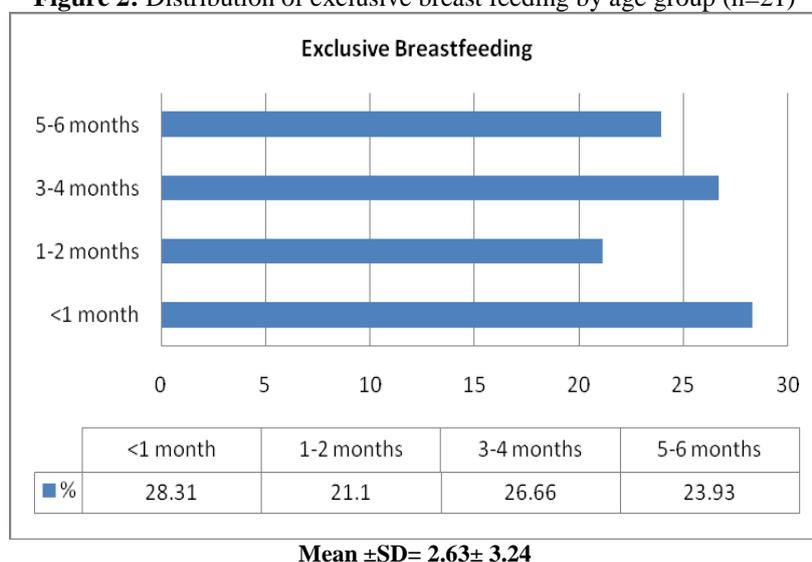


Table 2: Reasons for opting infant formula (n=28)

Reasons	Percentage (%)
Milk insufficiency	34
Resumption of work	15
Unwillingness of the child to suckle	14
Mother's desire	14
Other's	12
Medical complications	8
Doctor's recommendation	2
Aesthetic reason	1

V. Discussion

A cross-sectional descriptive study was conducted on a group of 100 mothers during from January 2018 to November 2018 in the outpatient dept. of Shahabuddin medical college, Dhaka, Bangladesh to elicit information about infant feeding practices by the use of a properly designed questionnaire given to the mothers. This study approved by Medical college authority and consents were obtained from all participants. Using a purposive sampling technique, 100 mothers were selected aged 18–45 years. A total of 100 respondents completed the questionnaire of which 71 were from urban areas and 29 were from rural areas, with 71% mothers having completed at least secondary level education. The age of the participants ranged from 18 to 45 years old whereby the majority of the participants (50%) belonged to the age group 25–31 years and most of them were living in a nuclear family (64%). A total of 93.4% of the mothers acknowledged that they breastfed their infants of which 64.7% stated that they were self-motivated to opt for the natural way of feeding their infant since they were aware of the health benefits of breast milk and claimed that “breast milk is best.” 60.6% of the participants initiated breastfeeding the same day after delivery, while 39.4% started to nurse their baby 24 hours after delivery. Although 35.7% of the participants had adequate knowledge on the definition/meaning of EBF, the practice was relatively low compared to the WHO recommendation, whereby only 21% of the women gave their infants only breast milk during the first six months. The main deterrent of EBF is the early introduction of water and infant formula. It is worth noting that mothers stated during the survey that they started to give water around 2 months. Major reasons not give to breast feeding were by milk insufficiency (22.6%) followed by Resumption of work(15%), Unwillingness of the child to suckle(14%), Mother's desire(14%), Other's(12%), Medical complications(8%), Doctor's recommendation(2%), Aesthetic reason(1%) as reported by the respondents. Figure depicts the number of months that mothers have exclusively breastfed their infants. The majority of the women practiced exclusive breastfeeding for less than one month (28.31%), while only 23.93% of them breastfed their child exclusively for around 5-6 months. The majority of the mothers completely terminate breastfeeding around 19–24 months (15.0%).

VI. Limitations of the study

We conducted this cross-sectional descriptive study in a single centre with small sample size. So the study results can't reflect the scenarios of the whole country.

VII. Conclusion and Limitations

Despite a high breastfeeding initiation rate of 72%, only 21% succeed to give exclusive breastfeeding until 5-6 months. The **Mean ±SD** of exclusive breastfeeding is = 2.63± 3.24 months, with adding water as the main reason for not continuing exclusiveness. Awareness of the health benefits of breastfeeding was noted in 65%, a percentage that may be increased by further breastfeeding education and support. The major barriers to breastfeeding practices in this study in terms of initiation, were, mainly milk insufficiency (22.6%) followed by Resumption of work(15%), Unwillingness of the child to suckle(14%), Mother's desire(14%), Other's(12%), Medical complications(8%), Doctor's recommendation(2%), Aesthetic reason(1%). These factors encourage early use of formula milk. On the other hand, complementary foods are normally introduced around 4 to 6 months and mothers usually start with home-made food because of its freshness and for hygienic reasons. However, there are very few mothers who encountered difficulties during the weaning process as compared during breastfeeding practices such as refusal to eat followed by vomiting, colic, allergic reactions, and diarrhea which were rare. There are two major limitations in our study. Future studies along the same line should target children of 3 years as it has been suggested by Khassawneh that this will reduce the risk of recall bias .To calculate the sampling size, the female population in the reproductive ages was considered. However, this data is not representative of the number of mothers aged between 18 and 45 years.

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