

# Feeding Pattern of below Two Years Old Children Attending in OPD of Mugda Medical College Hospital

Chowdhury AS<sup>1</sup>, Hossain F<sup>2</sup>, Baqi SAA<sup>3</sup>, Zaman R<sup>4</sup>, Islam S<sup>5</sup>, Yeasmin S<sup>6</sup>, Shahid ATM<sup>7</sup>, Afrooz F<sup>8</sup>

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## ABSTRACT

**Background:** Malnutrition is now a major public health issue for children. There are many reasons but lack of knowledge of ideal nutrition and inappropriate feeding practice may be one of the most important hidden problem. This study tried to point out that issue. The study was done to know the infant and young child feeding pattern for the children of 0-23 months of age attending out patient department of an urban hospital.

**Methods:** This cross sectional study was conducted among 157 mother/child pair attending the outpatient department of Mugda medical college hospital during the period of February 2018 to July 2018.

**Result :** Among the children of below 6 months of age 57.9 % was fortunate to experienced early initiation of breast feeding and exclusive breast feeding was 44.6 %. Continued breast feeding among the children of 12 to 15 months was 54.28 and 59.34 % children were given solid food at 6 months of age. Adequate minimum dietary diversity, minimum meal frequency and minimal acceptable diet among children 6-23 months were 52.73%, 67 % and 36.26 % respectively.

**Conclusion:** Early initiation of breast feeding(0-23mo) and Exclusive breastfeeding(0- 6mo) were satisfactory in the study children but IYCF practice in children of 6-23 months was not optimum and far away from the HPNSDP target.

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## Introduction:

In appropriate feeding practice including breast feeding during the first 2 years of life is now a major public health issue. Every year 1.4 million under

1. Dr. Abu Sayeed Chowdhury, Consultant, Pediatrics, Mugda Medical College Hospital
2. Dr. Farhana Hossain, Associate Professor, Ophthalmology, Popular Medical College
3. Dr. Shah Abdullah al Baqi, Consultant, Pediatrics, Gopalganj.
4. Dr. Rifat Zaman, Consultant, Central Jail Hospital, Dhaka
5. Dr. Saiful Islam, Consultant, Paediatrics, Dhaka Medical College Hospital
6. Dr. Shamima Yeasmin, Registrar, Paediatrics, Dhaka Medical College Hospital
7. Dr. A.T.M Shahid, Consultant, Pediatrics, Mugda Medical College Hospital
8. Dr. Farzana Afrooz, Consultant, Pediatrics, Mugda Medical College Hospital

**Correspondence :** Dr. Abu Sayeed Chowdhury, E-mail: shimulsayeed9@gmail.com

five children die due to direct or indirect cause of suboptimal breast feeding.<sup>1</sup> Failure of exclusive breast feeding at 0-5 months of age results in more than 2 fold increase risk of dying from diarrhoea and pneumonia than infants who are exclusively breastfed.<sup>2</sup> Exclusive breast feeding up to 6 months and continuing breast feeding up to 2 years along with introduction of nutritionally adequate, safe and age appropriate complimentary feeding at 6 months are established as the top most preventive child health interventions for their effectiveness in preventing child mortality.<sup>3,4</sup> The first two years of life is the critical window of opportunity for the child growth. Recent analysis have found that the effect of growth faltering during this period is severe on child health and survival especially for developing countries.<sup>5</sup>

Inappropriate feeding practice in infant and young children is one of the most serious obstacle in

maintaining nutritional status in children in Bangladesh. Only 21% children of 6-23 months of age are fed minimum acceptable diet according to IYCF recommendation which is little better in urban area)28%). Overall IYCF achievement is far away from the target of 52% of children to be fed with minimum acceptable diet by 2016. <sup>6</sup>

To know the actual feeding practice several studies were conducted in our country. Most of the studies were based on rural population. The present study is conducted to observe the feeding pattern of children attending at outpatient department of an urban hospital.

### MATERIALS AND METHODS

This is a cross sectional study conducted at the outpatient department of Mugda medical college hospital, during the period of February 2018 to July 2018. Sample size was calculated using standard formula among children less than 24 months. Total 157 mother child pair was interviewed. Mother / caregiver-child pair with children 0-23 months attending the OPD were included consecutively. Children who were sick requiring emergency care or who were irritable or mothers who were unwilling to participate were excluded from study. All mothers were interviewed after obtaining informed verbal consent. Predesigned questionnaire were used for data collection. Questions regarding feeding practices were adopted from WHO questionnaires for IYCF and the indicators were considered as per guidelines. All responses were recorded by 24 hours recall method except for initiation of breast feeding and exclusive breast feeding in children 6 to 23 months of age which were elicited by historic recall. Early initiation of breast feeding is considered when proportion of children born in last 24 months who were put on breast within one hour of birth. Exclusive breastfeeding is considered when proportion of

infants 0-5 months who were fed exclusively from breast on the previous day. Data analysis was done by using SPSS software version 22.

### RESULTS

Total 157 mother/caregiver- child pair were found eligible for analysis. Mean age of children in month was 6.65±6.15 months. Among the study children 42% were below 6 months of age and 58% were of 6 to 23 months age group. 54.41% were male and 45.59% were female. Among the mothers 82.8% were housewives and 17.2% were working mothers)Table-1). Mean age of mothers was 29.68 ±5.1 year. Breastfeeding was initiated with in 1 hour of birth in 57.9 % of the study children)0-23 months). Exclusive breastfeeding was found in 44.6% children under 6 months of age) Table-2. At the time of interview 54.28% of children of 12 to 15 months age were continuing breastfeeding) Table- 2.

**Table-1** Socio-demographic pattern of study children)n-157)

Indicators	No	%
Age of child		
0-6 months	66	42
6-23 months	91	58
Sex		
Male	87	54.41
Female	70	45.59
Delivered by		
NVD	77	49
C/S	80	51
Mother's occupation		
House wives	130	82.8
Working mothers	27	17.19

**Table- 2** IYCF status among study children

Indicators	Status	N	%
Early initiation of breastfeeding among children 0-23 months of age)N=157)	Within 1 hour	91	57.9
	After 1 hour	66	42.1
	Total	157	100
Exclusive breast feeding)N=157)	Yes	70	44.6
	No	87	55.4
Continued breast feeding among children 12-15 months of age)N= 57)	Yes	31	54.28
	No	26	45.72

16.66 % infants below 6 months were getting plain water, fruit juice, formula, diluted milk cows milk or solid food along with breast feeding and 36.36 % were fed with formula alone) Table-3.

**Table-3** Feeding pattern in 0-6 month old infants (n-66)

Pattern	Frequency	Percentage (%)
Exclusive breastfeeding	31	46.91
Bf+ formula or Cow's milk	11	16.66
Formula	24	36.36
Total	66	100

Early initiation of breastfeeding was higher) 84.4 %) in the child who delivered by NVD than the child who delivered by caesarean section)32.5%) Table 4) At the 6 to 7 months of age highest number of children received complimentary food) 59.34%) Table-5) Rate of exclusive breastfeeding was higher) 77%) among the children of housewives than children of working mothers which is 28%. Among 12-15 months of age group who continued breast feeding 73.3% were children of housewives and 26.6% were children of working mothers (Table-6).

**Table-4** Frequency of early initiation of breast feeding (n-157)

Mode of delivery	Total number of child	Number of early initiation of breast feeding	Percentage (%)
NVD	77	65	84.41
C.S	80	26	32.5

**Table-5** Timing of introduction of complimentary food) 6-23 months). n-91

Age	N=91	Percentage (%)
Before 6 months	13	14.28
6 to <7 months	54	59.34
7 months or more	24	26.37

**Table-6** : Breastfeeding status among children of housewives and working mothers.

Indicators	House wives	Working	Total	P* value
Continue breast feeding up to 12-15 months of child's age	42 (73.3 %)	15 (26.7%)	57	0.613

\*\*t' test

## DISCUSSION

Early initiation of breastfeeding within 1 hour of birth was found in 57.9% of study Children)0-23mo) which is higher than the observations of other two similar studies Aparajita et al 31.6%<sup>7</sup> and Ulak et al 57%<sup>8</sup>. It was also higher than the FSNSP report 2014)48%).<sup>9</sup> Early initiation of breastfeeding was more common in infants delivered by normal vaginal delivery(84.41%) than infants delivered by caesarean section(32.5%). It can be compared with in the rate found by Aparajita where early initiation was nil in case of caesarean section.<sup>7</sup>

In the present study 46.91 of 0- 6month old children were found to be exclusively breastfed which was better than the rate declared by FSNSP. 2014.(45%).<sup>9</sup> But it was less )58.7 %) than the observation by Das N<sup>10</sup> and also less than the BDHS 2011 data (63.5%)<sup>6</sup> 16.66 % infants below 6 months were getting plain water, fruit juice, formula other milk or complimentary food along with breast feeding and 36.36 % were fed with formula alone. According to BDHS.2011, 27.2% infants are getting plain water, fruit juice or other milk. In a Delhi based study prevalence of formula feeding was 26%<sup>11</sup>. Though statistically not significant an important observation is that the rate of exclusive breastfeeding was higher (73.3 %) among the children of housewives than those of working mothers were (26.7%). No association was found between modes of delivery with exclusive breast feeding. In a similar study there was also no association was found with mode of delivery<sup>12</sup>. Early weaning before 6 month of age was found in 14.28 and 26.37% of children were introduced solid or semisolid food after 7 months of age. A study by Salim et al in rural Bangladesh found 24% children had weaning at appropriate time where early weaning was prominent (50.4%)<sup>13</sup>. In another study study conducted in slum area 64% children

were started with complimentary food within 6-7 months 18% were introduced weaning food after 7 months.<sup>14</sup> 54.28 % children of 12-15 months age group were on continued breast feeding which is lower than study conducted by Sinhababu A et al)71.7%)<sup>15</sup> and BDHS data)95%) but higher than other study )43%)<sup>7</sup>

## CONCLUSION

In the present study IYCF practice in 6-23 months old children was not optimum and far away from the HPNSDP target But early initiation of breast feeding)0-23 months) and Exclusive breast feeding)0-6months) were satisfactory in the study children. An important observation which needs urgent attention is that frequency of exclusive breast feeding practice and continued breastfeeding was lower in working mothers than housewives. So proper steps should be taken to improve the existing situation.

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