<u>Original article</u>

Feeding pattern of children under two years in some selected villages.

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<u>Abstract</u>

Objective: The present study was aimed to find out the feeding pattern of children less than two years of age in rural areas. **Methodology:** The study area consisting of three villages of Muradnagar Upazila under the district of Comilla. Families having children under-two years of age were included in the study. A total number of 54 families finally entered in the study. Respondents were interviewed using structured questionnaire regarding initiation of breast feeding of the new born, their breast feeding pattern and weaning of the children. Socio-demographic characteristics of the respondents were recorded. Data were presented as number and percentage. **Results:** Out of the 54 respondents 52 (96.3%) were mothers and 2 (3.7%) fathers. Of the total 50 (92.6%) respondents was housewife. Among 54 respondents 36 (66.7%) were in the age group of 18 to 25 years. Thirteen (24.1%) respondents were illiterate and among the rest 27 (50%) had primary level and 2 (3.7%) had bachelor level of education. Twenty six (48.1%) respondents said newborns were given breast milk first and rest 28 (51.9%) mentioned about giving of honey, cow's milk and sweet water made of sugar or sugar product. Twelve (22.2%) mothers started breast feeding within 15 minutes after birth, 28 (51.9%) after 1 hour or more. Twenty one 21 (38.9%) had given exclusive breast feeding to the children for six months and 33 (61.1%) given additional stuff during that time. Thirty (55.6%) mothers started weaning before reaching 6 months of age, 13 (24.0%) between 6 months to 12 months and 1 (1.9%) started after 12 months. Commonly used weaning foods were rice, shuzi, khichuri, cow's milk, infant formula, fish, egg, meat, honey, vegetables and fruits especially banana. **Conclusion:** The data suggest wide range of variability still exists in allowing colostrums to the newborn, breast feeding itself and also weaning practice.

<u>Key Words</u>: Feeding pattern· weaning · children.

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Introduction

Bangladesh is one of the developing countries in the world which is densely populated with adult literacy rate 67%[1]. Most of the children both in rural and urban areas are malnourished[1]. People, particularly in the rural area, are still found to believe in various kinds of superstitions[2]. Infant mortality rate in Bangladesh is 63 per thousand live births[3]. This high mortality rates are suggested mainly due to malnutrition, infections and diarrhoeal diseases.

The first few years in a human life are precisely the period of physical, intellectual and psychological development. Malnutrition during this period retards children's development and robe them forever of their potentials[4]. Physically weak children usually found to have difficulty in learning in the school and perhaps drop out from the school is found to be very high in the rural areas which hinder government's policy to ensure education for all. In addition relatively high childhood mortality seemed be one of the reasons behind the high birth rate in Bangladesh[4]. Proper development of children is indeed importantly related to proper nutrition in the early years of life.

The present study was aimed to evaluate feeding pattern of rural children age less than two years which ultimately may help in future planning and promotion of breast feeding campaign for better childhood nutrition in Bangladesh.

Methods

This study was cross sectional descriptive type of study and conducted in the villages namely Paramtola, Nabipur and Doulatpur of Muradnagar Upazila under the District of Comilla during the period of May 10, 2005 to May 24, 2005. Socio-demographic characteristics of the respondents, first food given to the newborn, breast feeding pattern and weaning were considered to be important variables. A total number of fifty four (54) families, having children less than two years, were selected purposively and mother and/ or father (when mothers were unavailable or unwilling to be interviewed) of children were interviewed during the period of data collection by using a structured questionnaire.

Data were analyzed by using Statistical Package for Social Science (SPSS) for Window Version 11.0.

Results

Among 54 respondents 52 (96.3%) were female (mother) and remaining 2 (3.75%) were male (father). Out of 54 respondents 36 (66.7%) were in 18 to 25 years, 14 (22.9%) were in 26 to 36 years and 4 (7.4%) were of more than

35 years age group.

Out of 54 children 32 (59.3%) were male and 22 (40.7%) were female. Distribution of children of the respondent parents was as follows: 21 (38.9%) were between age group 6-12 months and 33 (61.1%) between more that 12 to 24 months. Formal educational status of the respondents was as follows: 13 (24.1%) were illiterate, 27 (50.0%) had primary, 12 (22.2%) secondary and remaining 2 (3.7%) had Bachelor degree or above. Among 52 female respondents 52 (96.2%) were housewife and 2 (3.8%) were in formal job. All of the respondents belonged to the low and lower middle income group; out of the 54 respondents 37 (68.5%) had family income less than Tk 5000/- and 17 (31.5%) more than Tk 5000/- per month. Out of 54 respondents 37 (68.55%) lived in tin shed house, 12 (22.2%) lived in kancha house and 5 (9.3%) lived in brick built house.

Breast milk as first food given to the newborn was in 26 (48.1%) cases followed by 21 (38.9%) honey (Table 1). It was observed that on 12 (22.2%) newborn were given breast feeding within 15 minutes and more that half of the babies, 28 (51.9%), were given breast milk after 1 hour (Table 2). With in 6 months of age exclusively breast milk was given in 21 (39.1%) babies and others were allowed additional items (Figure 1).

Table 3 describes different food items given to the babies with in six months in addition to the breast milk. Honey, cow's milk, infant formula, sweet water o sugar or sugar product rice product appeared more frequently.

Weaning of the children was shown in the table 4. Out of 54 children 30 (55.6%) started waning within 6 months, 13 (24%) 6-12 months and only 1 (1.9%) between 12-18 month. Ten (out of 54) were not weaned during the time of interview.

Foods during the weaning were shown in the table 5. Rice, shuji, khichuri cow's milk, infant formula were found to be main items of weaning.

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Table I: First food given to the newborn

Name of the food	N (%)
Breast milk	26 (48.1)
Honey	21 (38.9)
Sweet water (Sugar/ sugar product)	5 (9.3)
Cow's milk	2 (3.7)
Total	**54 (100)**

Table 2: Starting of breast feeding after birth

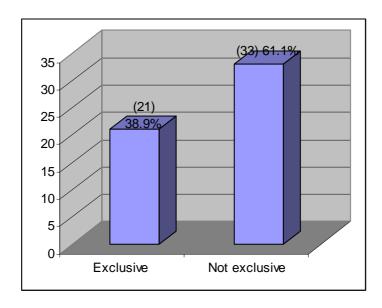| Starting time after birth	N (%)
Within 15 minutes	12 (22.2)
15 minutes – 30 minutes	10 (18.5)
30 minutes – 1 hour	04 (7.4)
More than 1 hour	28 (51.9)
Total	**54 (100)**

Figure 1: Bar chart shows exclusive or non-exclusive pattern of breast feeding

Table 3: Foods in addition to breast milk given within first 6 months

Name of the food	Frequency
Honey	21
Cow's milk	12
Infant Formula	10
Sweet water of sugar and sugar product	09
Shuji	10
Rice powder	10
Khichuri	03
Different other staffs	04

**Total number more than 54 because of multiple responses.

Table 4: Time of starting weaning

Time (months)	N (%)
0 – 6	30 (55.6)
6 – 12	13 (24.0)
12 – 18	01 (1.9)
Weaning not started	10 (18.5)
Total	**54 (100)**

Table 5: Weaning foods for the study children

Name of the food	Frequency
Rice	21
Shuji	19
Khichuri	17
Cow's milk	16
Infant formula	14
Biscuit	10
Lentil soup (Dal)	04
Banana and other fruits	04
Vegetables	03
Fish, egg, meat	12
Usual family food	03
Honey	02

*Total number more than 54 because of multiple responses.

Discussion

The main findings of the study were the presence of extreme differences in initiation of breast feeding to the newborn, pattern of breast feeding, start of weaning and also in selecting foods items for weaning. Out of 54 respondents 36 (66.7%) were in 18 to 25 years, 14 (22.9%) were in 26 to 36 years and 4 (7.4%) were in more than 35 years age group which was consistent with the findings of Khan MU[4]. Evaluation of formal educational state revealed 13 (24.1%) were illiterate, 27 (50.0%) had primary, 12 (22.2%) had secondary and 2 (3.7%) had Bachelor degree which was better than the national level data[2]. Sixty eight percent of the parents in the study came from the poorer background[5] which may have strong impact in the out come of the study. Data regarding the dwelling house of the study appeared to be consistent with country profile[5].

After birth within 15 minutes a baby should be first fed with breast milk[6]. The data suggests it is not happening- 26 (48.15%) newborn allowed colostrums. Remaining 28 (51.9%) was

provided with different other things this reflects ever present social belief and culture regarding allowing colostrums to the newborn[5]. After birth of the baby 12 (22.2%) mothers started breast feeding within 15 minutes. Twenty eight (51.9%) newborn received first breast feeding after 1 hour. And this needs to be addressed properly[6].

The present study revealed that only 21 (38.9 %) babies were breast fed exclusively which highlights the failure of breast feeding campaign in rural areas of our country. Out of 54 mothers 30 (55.6 %) started weaning within 6 months. This is also not ideal practice since only breast milk is sufficient during that period. Weaning foods mentioned by respondents were rice, shuzi, khichuri, cow's milk, infant formula, dal, fish, egg, meet, vegetables, fruits especially banana, honey and biscuits which suggests lack of clear idea and plan among the parents regarding weaning. It was concluded that feeding practice of newborn at birth and during weaning fail the

recommended guidelines and national agenda in some selected villages of Commila district. The findings need to be substantiated through a large scale study and attempt should be made to amend lapse in planning and promoting breast feeding campaign for proper nutrition of the children in their early age to improve their physical and intellectual development.

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