

Exclusive Breastfeeding & Complementary Feeding Practices and Their Nutritional Knowledge Among Mothers at Chowhali Upazila in Sirajganj District, Bangladesh

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Abstract: The study was conducted considering the exclusive breastfeeding, complementary feeding practices & their nutritional knowledge at Chowhali Char under Sirajganj area among 200 mothers in Bangladesh. There were 49% (n = 98) exclusive breastfeeding, early initiation 60% (n = 120) and 48% (n = 96) complementary feeding chosen for the study from Chowhali Char of the north Bengal using simple random sampling method. Results exposed to have 1500-5000 BDT family income & food expenditure 1200-3000 BDT per month; educational level was very low because there were no any secondary or higher secondary level, only 63% (n = 126) primary level. There were another feeding practice before exclusive breastfeeding i.e. 37.50% (n = 75) honey, 56.50% (n = 113) sugar & 6% (n = 12) others feeding so that child was not interest on exclusive breastfeeding; there were also exclusive breastfeeding duration was very low i.e. about 12.50% (n = 25) mother within 1-2 month, 81% (n = 162) 3-4 month & 6.50% (n = 13) mother 5-6 month. On the other hand, there were other feeding practices i.e. cow milk 44% (n = 88), formula milk 6% (n = 12) & 50% (n = 100) normal homemade food before six month. Their Nutritional knowledge were not good, only 19% (n = 38) known & 81% (n = 162) unknown mother about exclusive breastfeeding. Similarly 43.5% (n = 87) mother known about breast milk is easily digestible & 56.5% (n = 113) no knowledge; on the other hand, 87.5% (n = 175) mother known about breast milk is more nutritious than others food but 12.5% (n = 25) unknown. However, only 38 mother (19%) mother well known about balance diet but maximum mothers no knowledge i.e. 81% (n = 162); about 12.5% (n = 25) mother known on breast milk contains antibodies & 87.5% (n = 175) unknown; most of the mother there were no knowledge about breast milk which helps in physical & mental development i.e. 75% (n = 150) but only 25% (n = 50) mother knowledge it.

Keywords: Early Initiation, Exclusive Breastfeeding, Complementary Feeding, Nutrition Knowledge, Monthly Income, Mothers, Char Area

1. Introduction

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 medicines [1]. The major advantage of exclusive breastfeeding from 4 to 6 months includes

reduced morbidity due to gastrointestinal infection [2]. However, many researchers are questioning if there is sufficient evidence to confidently recommend exclusive breastfeeding for 6 months for infants in developed countries due to the fact that breast milk may not meet the full energy requirements of the average infant at 6 months of age [3]. Nevertheless, there is scanty data that give estimation about the proportion of exclusively breastfed infants at risk of specific nutritional deficiencies.

Breastfeeding, especially exclusive breastfeeding (EBF), is one of the most effective preventive health measures available to reduce child morbidity and mortality [4]. Appropriate feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and young children. It is argued that promotion of exclusive breastfeeding (EBF) is the most effective child health intervention currently feasible for implementation at population level in low-income countries [5]. EBF could lower infant mortality by 13%, and by an additional 2% were it not for the fact that breastfeeding may transmit HIV [6]. Predictors of breastfeeding and weaning practices vary between and within countries. Urban or rural difference, age, breast problems, societal barriers, insufficient support from family, knowledge about good breastfeeding practices, mode of delivery, health system practices, and community beliefs have all been found to influence breastfeeding in different areas of developing countries [1, 7, 8].

Nutrition education as one of the important practical aspects of nutrition knowledge, play an important role in raising public awareness and ultimately health of society [9]. The main goal of nutrition plans is obtaining the appropriate and necessary nutrition to remain healthy, to be physically prepared and to lead a healthy life. For this reason to promote the level of society health, the knowledge and attitudes of its people must be considered. Given that, one of the main goals of universities is to broaden the knowledge of people of society, so enhancing the nutrition attitudes, knowledge and practices of students have high importance, because this subsequently will lead to more food-conscious society and more healthy people. Also, students are more likely to change positively; therefore, nutritional education to enhance their knowledge can be helpful for the community. On the other hand, some researches have shown that most students are not familiar with healthy foods needed for their body in different conditions [10, 11] and need to have nutrition education programs [12]. Ruka's research showed that the majority of students (83.6%) eat the three meals of the day regularly and no difference was found between men and women [13]. Although Ruka showed 85.6% of students are familiar with concepts of balance between the nutrients in foods, but only 7% of them use it in their diet, yet 51% of students showed a tendency towards learning healthy diet [13].

2. Materials and Methods

2.1. Study Nature

The study was a cross-sectional study.

2.2. Study Areas

The exclusive breastfeeding, early initiation, complementary feeding practices and their health & nutrition knowledge Omerpur & Sadaichadpur Union at Chowhali Upazila in Sirajganj district under Rajshahi division of Bangladesh.

2.3. Study Period

The study was conducted from August 2016 to January 2017.

2.4. Study Population

There were framed a sum of 200 mothers are applying simple random at sampling method from two Union at Chowhali Upazila in Sirajganj district of Bangladesh.

2.5. Age Consideration

There were framed 40 years mothers.

2.6. Sampling Procedure

The simple random sampling method was applied for the study maintenance in full swing.

2.7. Data Collecting Tricks

A pre-planned questionnaire was twenty five containing both the open and closed ended questions with a view to collect the relative query on exclusive breastfeeding, early initiation, complementary feeding practices and their nutritional knowledge was the questionnaire answer givers. The inclusion criteria were extreme poor, poor & medium poor family, cultivation landless, monthly income average 5000 BDT & Char area. On the other hand, exclusion criteria were over 40 years mothers, rich family i.e. 33 decimal cultivation land, monthly income 10000 BDT.

2.8. Data Verification

The questionnaire was checked per day taking the interview and again these were carefully rechecked after collecting all the data and coded prior the entering into computer technology. The data was edited in case of sighting any discrepancy (doubt entry, wrong entry etc.).

2.9. Data Analysis

The data were processed to undergo statistical analysis using SPSS 16 windows program. Microsoft Word, Microsoft Excel 2010 was used to represent the column, charts and graphical idol.

3. Results

A descriptive cross sectional study was carried out exclusive breastfeeding & complementary feeding Practices, nutritional knowledge & economic profile in selected char area's mothers. The salient feature of this study is presented in the following:

3.1. Demographic Data

A descriptive cross sectional study was carried out 200 mothers from the randomly selected Omerpur & Sadaichadpur Union in Sirajganj district, the significant Char area in Bangladesh.

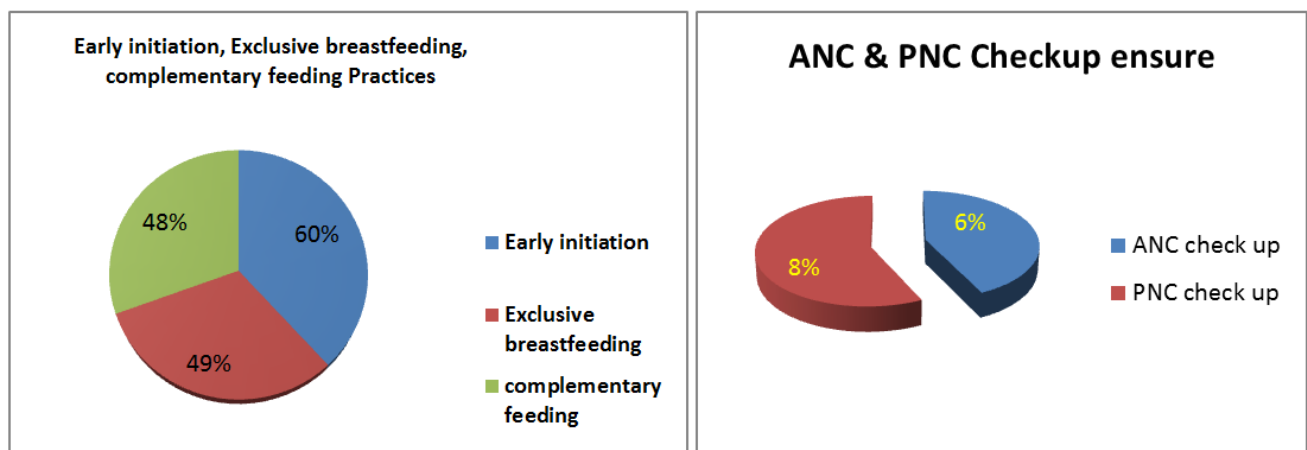
Table 1. Practices & Knowledge characteristics of the respondents (N = 200).

Parameters	Frequency	%
Education Level		
Illiterate	74	37
Primary	126	63
Secondary	0	0
Higher secondary	0	0
Graduation	0	0
Occupation		
House wife	182	91
Employee	0	0
Day labour	18	9
Servant	0	0
Monthly Family income		
BDT 1500-3000	155	77.5
BDT 3000-5000	43	21.5
BDT >5000	2	1
Monthly Food expenditure		
BDT 1200-2000	165	82.5
BDT 2000-3000	35	17.5
BDT >3000	0	0
Early initiation practices	120	60
Exclusive breastfeeding practices	98	49
Supplementary feeding practices	96	48
ANC check up	12	6
PNC check up	16	8
Any Feeding before breastfeeding		
Honey	75	37.5
Sugar	113	56.5
Water	0	0
Others	12	6
Exclusive breastfeeding duration		
1-2 months	25	12.5
3-4 months	162	81
5-6 months	13	6.5
>6 months	0	0
Other feeding under six month		
Cow milk	88	44
Formula milk	12	6
Fruit juice	0	0
Khichuri	0	0
Normal homemade food	100	50

Parameters	Frequency	%
Nutritional Knowledge		
Exclusive breastfeeding		
Yes	38	19
No	162	81
Brest milk is easily digestible		
Yes	87	43.5
No	113	56.5
Brest milk is more nutritious than others food		
Yes	175	87.5
No	25	12.5
Brest milk contains antibodies		
Yes	25	12.5
No	175	87.5
Brest milk helps in physical & mental development		
Yes	50	25
No	150	75
Balance diet		
Yes	38	19
No	162	81

3.2. Early Initiation, Exclusive Breastfeeding, Complementary Feeding, ANC & PNC Checkup Ensure, Educational Background and Nutritional Knowledge Information

The figure 1(a) shows that about 49% (n = 98) exclusive breastfeeding practice, 60% (n = 120) early initiation & 48% (n = 96) complementary feeding practice where BDHS 2014 data was 57% exclusive breastfeeding. Early initiation & complementary feeding practice was slightly well but they are no clear knowledge. On the other hand figure 1(b) also shows that ANC & PNC practice was very low respectively 6% (n = 12) and 8% (n = 16).

**Figure 1.** Exclusive breastfeeding, early initiation & complementary feeding practices status (a) and ANC & PNC checkup ensure status (b).

The analysis of figure 2(a) shows that, out of 200 women 63% (n = 126) were primary level and 37% (n = 74) Illiterate but no Secondary, Higher secondary & Graduation level. Primary level was well but no completed class five maximum class two or three levels. On the other hand figure 2(b) also shows that about 91% (n = 182) house wife and 9% (n = 18) day labour & there were no any employee.

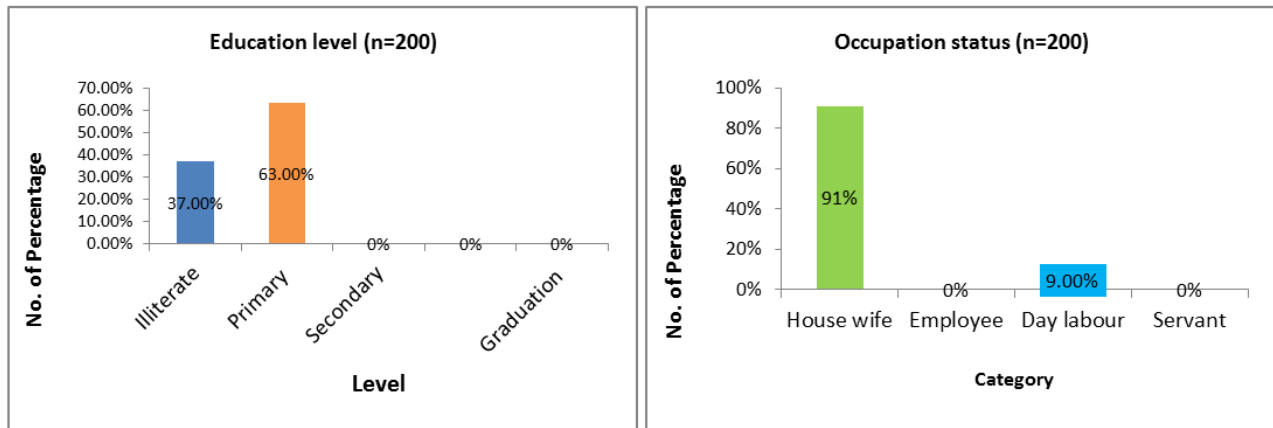


Figure 2. (a) Education level & (b) Occupation Status.

Figure 3 shows that the out 200 women were practice other feeding before breastfeeding while 37.50% Honey, 56.50% Sugar & 6% others.

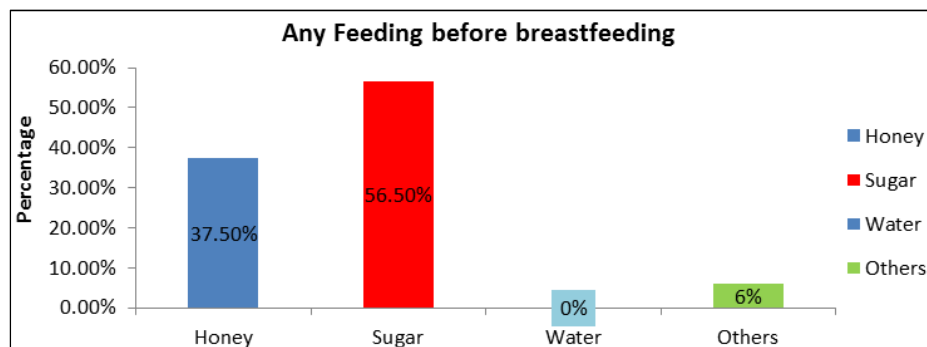


Figure 3. Any Feeding before breastfeeding.

Figure 4(a) showed that Exclusive breastfeeding duration while 12.50% (n = 25) lactating mother practice within 1-2 month, 81% (n = 162) practice 3-4 month, 6.50% (n = 13) practice 5-6 month. On the other hand figure 4(b) also shows that other feeding practicing about 44% cow milk, 6% formula milk & 50% normal homemade food below six months.

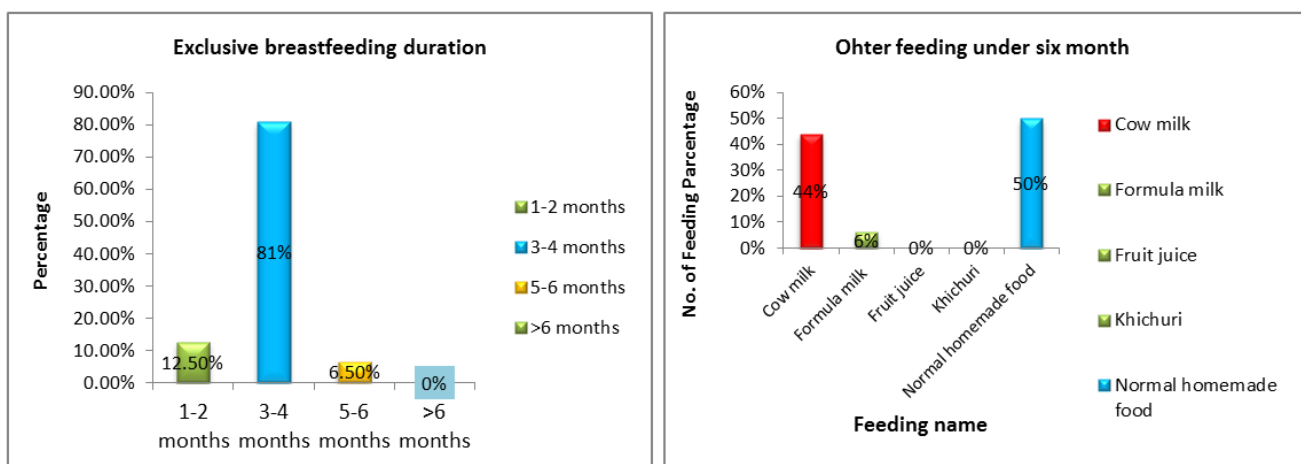


Figure 4. (a) Exclusive breastfeeding duration & (b) Other feeding below six months.

The analysis of figure 5(a) shows that, out of 200 mother only 38 (19%) mother know about exclusive breastfeeding but 162 (81%) no knowledge. Similarly 87 (43.5%) mother know about breast milk is easily digestible & 113 (56.5%) mother no knowledge; 175 (87.5%) mother knowledge about

breast milk is more nutritious than others food but 25 (12.5%) mother no knowledge on it. On the other hand figure 5 (b) shows that only 38 (19%) mother well known about balance diet but maximum mother no knowledge i.e. 162 (81%); 25 mothers know on breast milk contains antibodies

& 175 (87.5%) mother no knowledge; breast milk helps in physical & mental development most of them (150 nos) no

knowledge only 50 (25%) mothers know it.

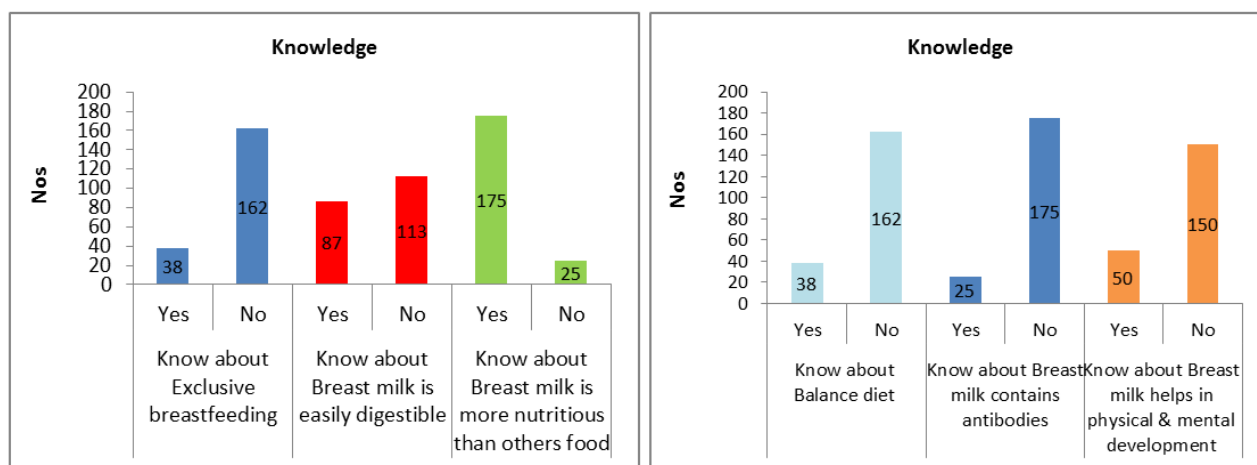


Figure 5. (a) Exclusive breastfeeding, Breast milk is easily digestible; Breast milk is more nutritious than others food knowing status & (b) Balance diet; Breast milk contains antibodies; Breast milk helps in physical & mental development knowing status.

4. Discussion

There are number of studies have done on the prevalence of early initiation, exclusive breastfeeding, complementary feeding & health & nutritional knowledge among mother in Char area of Chowhali Upzila under Sirajganj district. The data analysis of mothers exclusive breastfeeding practice was very low 49% (n = 98) where national data 57% (BDHS-2014) [14] but early initiation was high about 60% but there were no clear knowledge on its. On the other hand complementary feeding practice slightly increase 48% (n = 96) where rural national data 39.9% (MICS 2012-2013) but complementary feeding was not maintain properly i.e. food group/balance diet. Similarly also shows that ANC & PNC practice was very low respectively 6% (n = 12) and 8% (n = 16) where Rajshahi division ANC data 8% (BDHS 2014) [14]. There were no found any data of secondary, higher secondary & graduation level at research study found that only 63% (n = 126) were primary and 37% (n = 74) illiterate but no completed class five maximum class two or three category whereas national data (MICS 2012-13) primary completed 57.7% [15]. On the other hand, occupational result about 91% (n = 182) house wife and 9% (n = 18) day labour where there were no any employee so that monthly family income were very low about 21.5% range 3000-5000 BDT and food expenditure 17.5% range 2000-3000 BDT so that their nutritional status was not good. About 37.50% honey, 56.50% sugar & 6% others were practicing other feeding before exclusive breastfeeding completed.

The result showed that maximum mothers practice duration bases on exclusive breastfeeding about 81% (n = 162) 3-4 month & 6.50% (n = 13) mother practice 5-6 month. On the other hand result also shows that other feeding practicing about 44% cow milk, 6% formula milk & 50% normal homemade food before six months. The analysis of result about nutritional knowledge status shows that, out of

200 mothers only 38 (19%) know about exclusive breastfeeding & 162 (81%) mother no knowledge. Similarly 87 (43.5%) mothers know on breast milk is easily digestible where 113 (56.5%) mother no knowledge; 175 (87.5%) mother knowledge about breast milk is more nutritious than others food but 25 (12.5%) mother no knowledge on it. On the other hand figure 5 (b) shows that only 38 (19%) mother well known about balance diet but maximum mother no practices i.e. 162 (81%); 25 mother know on breast milk contains antibodies where 175 (87.5%) mother no knowledge; breast milk helps in physical & mental development most of them (150 mother) no knowledge only 50 (25%) mother know it. The overall study found that no any servant or employee; nutritional knowledge was very poor; early initiation was very well but exclusive breastfeeding & complementary feeding was low & also monthly income very low.

5. Conclusion

Early initiation, exclusive breastfeeding, complementary feeding practicing & nutritional knowledge are the significant for behavior change concerns in developing countries and the foremost child mortality. The overall analysis of the study revealed that the mothers were one of the poorest sections of the society living in Char area & miserable poverty. In mothers there are needs to nutrition awareness to have any special skill to exclusive breastfeeding, early initiation, and complementary feeding system. So the stakeholders should take immediate intervention to increase their health & nutritional knowledge. The government and the NGOs should organize different campaigning to aware them about exclusive & complementary feeding, health & nutrition, hygiene and sanitation issues to reduce mortality & also lead them a healthy life.

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