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KNOWLEDGE ON BREAST FEEDING AND WEANING AMONG MOTHERS OF INFANTS IN ICDDR,B HOSPITAL, DHAKA

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Abstract: *This study was carried out to assess knowledge regarding breast feeding and weaning among lactating mothers of infants attending International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) Hospital. A pretested semi-structured questionnaire was used for this purpose and the study period was May to August 2011. 200 lactating mothers with children less than one year of age was selected. The study revealed that the mean age of mothers was 24± SD 6 years and mean age of child was 6.25 months. Most of respondents were Muslim (92.5%) and from nuclear family (62.5%). Most of the respondents had completed their primary education (56%), 82% of them are house wife, most of the respondents family income ranges from BDT 3,000-10,000. Majority of the respondent had mean monthly income of BDT 6028 ± SD 4636. Marital age's ranges from 18-22 years and 23% were less than 18 years. Majority of infants' mother (81%) thought that breast feeding is compulsory for every child. About (46%) opined that colostrum is needed for infants. About 26% thought that thickness of colostrum is indigestible and 22% thought that colostrum may be harmful for the infants. Only 33.5% had fair knowledge on breastfeeding but majority (72.5%) of the infant's mother shows fair knowledge regarding weaning. About 75 % mother got information regarding breast feeding and weaning knowledge from television. The knowledge of mothers regarding breast feeding was poor but their knowledge on weaning was comparatively adequate.*

Keywords: *Infant, breast feeding, lactating, respondents, nuclear family*

Introduction

Breast feeding is the most natural way of infant feeding to satisfy nutritional, metabolic and psychological needs of the baby. A child who is breast fed has greater chances of survival than a child artificially fed. Breast feeding significantly reduces the risk of death especially from diarrhea and pneumonia in infants compared to formula fed babies[1]. It also protects the infant from early malnutrition and some infections[2]. WHO recommends exclusive breast feeding for first 4 – 6 months followed by addition of semisolid & solid foods to complement breast milk till the child is gradually able to eat the normal food[3]. Breastfeeding is nature's way of nurturing the child, creating a strong bond between the mother and the child by developing baby's trust and sense of security. Breastfeeding is important for young child survival, health & nutrition, Exclusive breastfeeding and longer duration of breast feeding is known to protect the child from obesity risks, it also helps in enhancing brain development and learning readiness. Breast feeding also serves as one of the child spacing methods, which is especially important in developing country like ours where the awareness, acceptability & availability of modern family planning methods are very low[4]. Only 35% of infants world-wide are exclusively breastfed during

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the first four months of life and complementary feeding begins either too early or too late with foods which are often nutritionally inadequate and unsafe[4]. The prevalence of breastfeeding differs from one country to another and from one society to another, this of course is due to cultural and religious believes[5]. Delayed breastfeeding initiation, colostrum deprivation, supplementary feeding of breast milk substitutes, early introduction of complementary feeding, and incorrect weaning from breast milk are commonly found practices in communities around the world[6]. The recommendation by WHO to exclusively breastfeed for the first six months of life is met only by 64 percent of children under two years in Bangladesh. Complementary foods are introduced at an early age. Among infants less than two months, 85 percent are being exclusively breastfed, while other infants are given water (6 percent), other milk (7 %), and complementary foods (2 %) in addition to breast milk. Bottle feeding is not uncommon in Bangladesh; around one in five infants (6-9 months) is fed with a bottle with a nipple[7]. Weaning is the term usually used to describe the process of cessation of breastfeeding after a period of successful breastfeeding. This usually involves addition of food to infant's diet and/or replacement of breast milk in infant's diet with another type of milk (formula or whole milk). Maternal physiology, infant nutritional needs, infant development, especially the development of biting and chewing, and cultural issues all play a role in the timing of weaning[8].

Materials and Methods

This descriptive cross sectional study was carried out from May to August 2011 to find out knowledge level regarding breastfeeding and weaning among lactating mothers with children under one year of age attending icddr,b hospital, Mohakhali, Dhaka. Icddr,b is the international Center for diarrhoeal disease research, Bangladesh and international health research institution located in Mohakhali, Dhaka. Icddr,b is the only specialized hospital for diarrhoeal disease of Dhaka. Catchment area of this hospital is very big, Matlab is the major rural field site. Besides Matlab and the urban sites- Kamalapur and Mirpur - icddr,b manages an extensive network of field stations across Bangladesh to support surveillance, population-based and health systems research. These include field areas in Abhoynagar, Mirsarai, Chakaria, Sylhet, Mirzapur and others. Most of the people coming here for treatment are from low socio economic status. Purposive sampling techniques were adopted to select the required samples. Those lactating mothers who were willing to give verbal consent and participate in interview were included in the study. Semi-structured pre tested questionnaires was used to collect data. The questionnaire contained questions on socio-demographic and socio-cultural characteristics of the respondents, questions on knowledge of breastfeeding and weaning and also questions related to health education.

Data analysis and management plan

SPSS program was used for data analysis and data was analyzed by using simple descriptive statistical method such as mean, median, SD and percentile. The data were described by cross table and chi square. Also data were presented by pie chart, table, bar and graphs.

Results

Table 1: Distribution of the respondents' according to socio demographic characteristics: (n=200)

Variable	Frequency	Percent
Age group of the Respondents		
< 20 yrs	70	35
21-30 yrs	109	54.5
31-40 yrs	16	8
> 40 yrs	5	2.5
Religion of the Respondents		
Islam	185	92.5
Hindu	14	7
Christian	1	0.5
Occupation of the Respondents		
House wife	164	82
Service	20	10
Labor	16	8
Occupation of the respondent's Husband		
Business	68	34
Labor	34	17
Service	86	43
Jobless	12	6
Educational status of the respondents		
Illiterate	22	11
Primary	112	56
Secondary	54	27
Graduate	11	5.5
Post graduate	1	0.5
Educational status of the respondents Husband		
Illiterate	31	15.5
Primary	83	41.5
Secondary	63	31.5
Graduate	18	9
Post-graduate	5	2.5
Type of Family of the respondents		
Nuclear	125	62.5
joint	50	25
Extended	25	12.5
Family income range of the respondents		
< 2000	22	11
3000- 5000	123	61.5
6000-10000	11	5.5
> 10000	44	22
Age during marriage of the respondents		
<18 yrs	46	23
18-22 yrs	107	53.5
23-26 yrs	32	16
> 26 yrs	15	7.5
Under 1 year children of the respondents		
One	195	97.5
Two	4	2
More than two	1	0.5

A total of 200 infant's mother was interviewed. Their mean age was 24 years with standard deviation ±6 years. Majority of the participants had primary education (56%)

and 61.5% had monthly income of TK 3000 – 5000. Majority of the respondents (53.5%) marital age ranges between 18 to 22 yrs. About 23% respondents marital age were <18 years.

Table 2: Distribution of the respondents' according to knowledge on colostrum (n=200)

Reasons	Frequency	Percentage
Colostrum is needed	92	46.0
Thickness can't be digested by baby	52	26.0
May be harmful	44	22.0
Others	12	6.0
Total	200	100.0

Socio cultural factors related to breast feeding and weaning: Majority of infants' mother (46%) thought that colostrum is needed for infants. About 26% thought that thickness of colostrum is indigestible and 22% thought that colostrum may be harmful for the infants.

Table 3: Distribution of infants' mother according to their thinking/belief regarding breast feeding (n=200)

Thinking / belief	Frequency	Percentage
It is compulsory for every child	162	81
Improve bonding between mother & child	35	18
No differences between BF & FF	03	1.5
No role for growth & developments it is optional food	01	0.5

*Multiple responses

Thinking/ belief regarding breast feeding: Majority of infants' mother (81%) thought that breast feeding is compulsory for every child. Only one .5% infant mother told that breast feeding has no role for growth & developments of child; it is only optional food.

Table 4: Distribution of infants' mother according to their thoughts regarding factors for delayed weaning (n=200)

Factors	Frequency	Percentage
Superstitions that breast milk is sufficient	46	23.1
Khichuri is the leading cause of diarrhea	40	20.1
Baby is not willing to accept weaning food	108	54.3
Others	05	2.5
Total	199	100.0

Factors for delayed weaning: Among the 200 infants' mother 108 (54.3%) told that starting of weaning is delayed because baby is not willing to accept weaning food and 23% believed that breast feeding was sufficient.

Table 5: Distribution of respondents' according to source of information regarding health education of breast feeding & weaning (n=200)

Source of information	Frequency	Percent
Family members	00	0.0
Radio	03	1.5
Television	150	75.0
News paper	03	1.5
Health care provider	44	22.0
Total	200	100.0

Health education related factor: About 75% of the respondents' acquired health education regarding breast feeding and weaning from television followed by health care provider 22%.

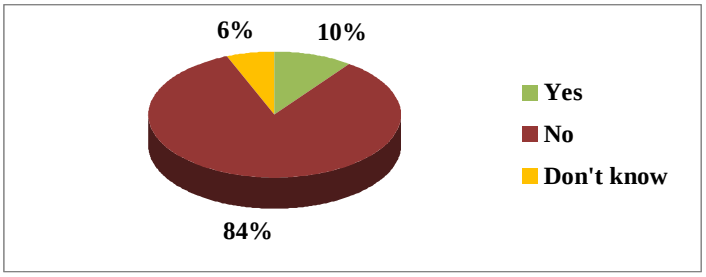

Figure 1: Distribution of respondents' according to their taking part in training / orientation / seminar on exclusive breast feeding & weaning

Training/orientation/seminar on EBF & weaning: Figure No1: shows only 10% of the respondents' get training/orientation/seminar on exclusive breast feeding (EBF) & weaning.

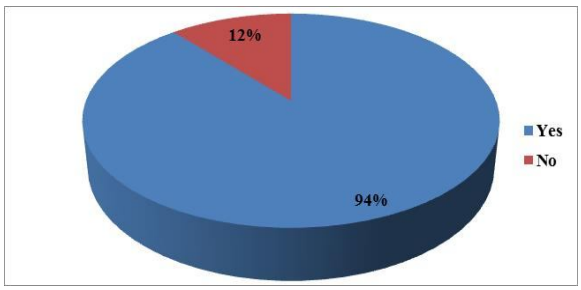

Figure 2: Distribution of respondents' who supports health education regarding breast feeding and weaning in the education curriculum

Necessity to Include in the education curriculum: Figure 2 shows 94% respondents' want to include health education regarding breast feeding and weaning in the education curriculum

Table 6: Distribution of infant's mother according to Knowledge about breast feeding (n=200)

Composite score of knowledge about breast feeding		
Score	Frequency	Percentage
0	00	0.0
1-2	20	10.0
3-4	113	56.5
5-6	62	31.0
7-8	05	2.5
9-11	00	0.0
Total	200	100.0

Knowledge related to breast feeding, weaning and other factors of infant nutrition

*Knowledge about breast feeding and weaning***:** Maximum question for knowledge on breast feeding and weaning were16.Among those who scored 9-11 had excellent knowledge. Those who scored 5-6 had average knowledge and mothers who scored 3-4 had poor knowledge. Majority (56.5%) of the infant's mother scored 3-4 indicated poor knowledge regarding breast feeding and 33.5% had fair knowledge on breastfeeding.

Table 7: Distribution of infant's mother according to Knowledge about weaning (n=200)

Composite score of knowledge about weaning		
Score	Frequency	Percentage
0	02	1.0
1-2	11	5.5
3-4	42	21.0
5-6	72	36.0
7-8	54	27.0
9-11	19	9.5
Total	200	100.0

Knowledge about weaning: Majority (72.5%) of the infant's mother shows fair knowledge regarding weaning

Table 8: Distribution of infant's mother according to their opinion to start additional feeding for their child (n=200)

Indicating factors	Frequency	Percentage
Breast milk is not sufficient	50	25.0
Cultural practices	01	0.5
Growth & development	148	74.0
Childs want to eat himself	01	0.5
Total	200	100.0

Indication to start additional feeding: About 74% infant's mother told that growth and development is the indicator to start additional feeding for their baby.

Discussion

This study provides information regarding existing knowledge of mothers on breast feeding and weaning in icddr,b hospital Mohakhali, Dhaka. The result of the study may not be generalized to represent the whole Bangladesh because of the limited coverage. The mean age of the mothers in my study was 24 years with SD of 6 years and half of them had primary education. This is similar to a study done on feeding practices of infants among the mothers in selected villages, at Dhamrai [9]. The present study showed that 81% respondents knew that breast feeding is a complete food which is similar to a study carried by Mohit in Maharastra, India where they found it to be 82.7% [10]. The importance of colostrum is known to the limited population. There are still many people who believe that colostrum is a harmful substance which should be discarded. It is thought to be an unwanted substance related with ill health. There are certain barriers perverting the feeding of colostrum to the new born babies[11, 12]. In our study (46%) thought that colostrum is needed for infants but in a study done in Nepal 41 % women believed that it helps for proper growth of child and fights against infection which is slightly lower than our study. In this study about 26% thought that thickness of colostrum is indigestible and 22% thought that colostrum may be harmful for the infants. But in the study done in Nepal 27% did not know the exact role of colostrum whereas 31 % women had no knowledge about colostrum and 1 woman thought it has bad effect to the child's health which is dissimilar to my study[13]. In the current study the reasons for delayed weaning was breast milk being sufficient and baby is not willing to accept weaning food which is supported by a study done in India[14]. Knowledge on breast feeding in this study was found to be low (56.5%). A study done by Chaudhary RN et al in Dharan, Nepal also had similar findings where knowledge on breastfeeding was not adequate[15]. Another study done on Knowledge and attitude of the Bangladeshi rural mothers regarding breastfeeding and Weaning supported this study where mean score of knowledge of the mothers was only 4±1.7[16]. A descriptive cross sectional study on mother's knowledge and practice related to weaning at Butajira, S.Ethiopia in 1994 revealed that 68% children were on weaning diet and their mother had adequate knowledge on weaning. This is nearly similar to our study where 72.5% mothers had weaning knowledge[17].

Conclusion

The knowledge of mothers regarding breast feeding was poor but their knowledge on weaning was comparatively adequate. Poverty, illiteracy, cultural beliefs and lack of health education had played a contributing role for their misconception. All mothers should be educated about basic principles of breast feeding & weaning during antenatal period. Literacy rate should be increased among rural females. Some unacceptable ignorance's like pre-lacteal feed, discarding colostrum, lack of early initiation of breastfeeding, very early or delayed initiation of weaning food were found to be prevalent throughout the study. These portions of mothers need to be educated and motivated about the usefulness and proper use weaning food by the concern agencies for the betterment of health status of the children. Our nation should give additional efforts to ensure adequate knowledge of mothers that will confirm the significant improvement of breast feeding and weaning globally.

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