

Original Article

Study on knowledge and practice of nursing mother regarding exclusive breast feeding irrespective of socio-demographic characteristics.

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Abstract:

This descriptive type of cross-sectional study was conducted in Dhamrai, Dhaka among nursing mother with a sample size 120 using semi-structured questionnaire to determine the knowledge and practice regarding exclusive breast feeding irrespective of socio-demographic characteristics from January 2018 to February 2018 employing purposive sampling method. The percentage of mother-infant pair were highest within 20-30 years (65%) of age group. About 13.33% of mothers were illiterate, 33.33% had primary level and only 2.50% completed graduation; more than half (56.67%) of the mothers were housewives. It was revealed that 55.83% of the respondents had knowledge of exclusive breast feeding, however 42.50% of them gave only breast milk up to 6 months. The initiation of breast feeding within 1 hour was 47.50%, 32.50% within 1-2 hours. 8.83% after 2 hours, 9.16% of the respondents did not remember about the exact time and 2.50% did not breast fed their babies, the reason of not feeding breast milk was insufficient milk secretion. Premature complementary feeding was associated with an increased occurrence of vomiting (47.50%), diarrhea (59.16%), dyspnea (19.16%) but 55% of the respondents did not mentioned specific condition. One of the ten steps to successful breastfeeding is initiating breastfeeding within the first hour of delivery, the major barrier to achieving the recommendations of the Global Strategy for Infant and Young Child Feeding.

Key words: Exclusive Breast Feeding, Prolactal Feeding,

Introduction:

Breast feeding (BF) is defined as the method of feeding a baby with milk directly from the mother's breast. According to a WHO report on infant feeding recommendations, BF is classified as 'an unequalled way of providing ideal food for the healthy growth and development of infants'.¹

Exclusive breastfeeding (EBF) has been defined by the WHO as the situation where "the infant has received only breast milk from his/her mother or a wet nurse, or expressed breast milk and no other liquids, or solids, with the exception of drops or syrups consisting of vitamins, minerals, supplements or medicines". Breastfeeding is a natural food that serves as a complete source of infant nutrition for the first six months of life.²

Breast milk contains the nutrients that a baby needs in the right quantity. Nutrients of Breast Milk are quickly and easily digested in the body systems of infants. Breastfeeding activities are carried out worldwide in order to fulfill the WHO and United Nations Children

Emergency Fund (UNICEF) recommendation that infants be breastfed exclusively for six months and thereafter until 24 months.³

Successful breastfeeding is an interactive process of both the mother's and baby's physical and psychological needs. The risks associated with the addition of liquids and food to the diets of infants under six months old include: reduction of breast milk intake (with the consequent reductions of all associated benefits); lower milk production (resulting from reduced milk extraction); higher odds of shortening the duration of breastfeeding; difficulty establishing efficacious breastfeeding; and reduction of the mother's confidence.⁴

Several factors might account for the decision of mothers to start complementary feeding; The factors include "lack of milk", "weak milk" and that breast milk does not suffice to satiate the child's hunger or thirst. It is observed that the mothers were influenced by the children's grandmothers to introduce other types of food at the time when breastfeeding ought to be exclusive; that was

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particularly the case of the first time mothers and lack of experience.⁵

In Bangladesh, the trend of practicing exclusive breast feeding among the lactating mothers remained mostly unchanged for a long time. The prevalence of exclusive breast feeding was nearly 45% in 1993–94 and 1999–2000, 42% in 2004 and 43% in 2007. The prevalence of exclusive breast feeding markedly increased to 64% but declined to (55%) in the recent report of BDHS in 2014.⁶

Globally infant and young child deaths occur mainly due to inappropriate infant feeding practices and infectious diseases. Directly or indirectly, malnutrition has been responsible for 60% of 10.9 million under five deaths. More than two third of these deaths were often associated

Results:

Table 1: Distribution of respondents according to socio-demographic characteristics (n=120)

Characteristics	Categories	Respondent	
		Frequ	Percentages
Age of mother (years)	<20	11	9.16
	20-30	78	65.00
	>30	31	25.83
Religion	Muslim	97	80.33
	Hindu	23	19.17
Mothers education	Illiterate	16	13.33
	Informal	14	11.67
	Primary	40	33.33
	Secondary	27	22.50
	Higher Secondary	20	16.66
	Graduate	3	2.50
Occupation of mother	housewife	68	56.67
	day-labor	18	15.00
	Service holders	25	20.83
	Business	3	2.50
	others	6	5.00
Number of children	<2	15	12.50
	2-3	64	53.33
	>3	41	34.16
Monthly Family Income	<10,000 BDT	16	13.33
	10,000 --20,000 BDT	67	55.83
	>20,000 BDT	37	30.83

with inappropriate feeding practices during the first year of life. In order to reduce infant and young child mortality, exclusive breastfeeding has been recognized as one of the major interventions worldwide.⁷

Materials and Methods:

This descriptive type of cross-sectional study was conducted in Dhamrai among nursing mothers with a sample size 120 using semi-structured questionnaire to determine the knowledge and practice of nursing mother regarding exclusive breast feeding irrespective of socio-demographic characteristics employing purposive sampling method from January 2018 to February 2018. The data was cleaned, edited and analyzed with the help of SPSS version 22.

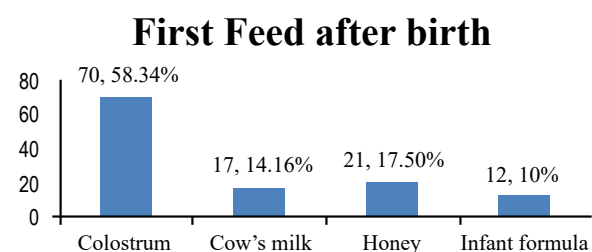


Fig 1: Distribution of respondent, according to type of feeding just after birth (n=120)

Exclusive breast feeding

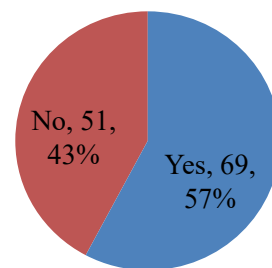


Fig 2:- Distribution of respondents according to Exclusive breast feeding practice (n=120).

Table 2:- Distribution of respondents by knowledge and practice regarding Exclusive Breast Feeding (n=120)

Variable	Frequency	Percentages
Knowledge of exclusive breast feeding		
Only breast feeding up to 6 months	67	55.83
Only breast feeding up to 2 years	16	17.00
Breast milk with cow's milk	8	6.66
Breast milk with powder milk	10	8.33
Have no idea	19	15.83
Time of initiation of breast feeding		
<1 hour	57	47.50
1-2 hour	39	32.50
>2 hour	10	8.83
Did not remember the exact time	11	9.16
Did not attained breast milk	3	2.50

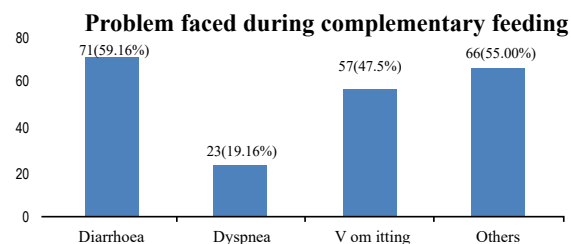


Fig 3: Problem faced during complementary feeding (Multiple response)

Discussion:

The study was conducted on sample of 120 mothers and their infants selected purposively to assess the knowledge and practice of exclusive breast feeding among nursing mother irrespective of socio-demographic characteristics. Exclusive breastfeeding during the first 6 months and therefore timely introduction of complementary feeding have many proven advantages to both the mother and the child and are therefore the prime focus in infant feeding promotional activities.

In the present study it was observed that only 42.50% of the infants were exclusively breastfeed which is lower from studies observed by Dipen V Patel 57.5%⁸ and D Kumar et al (55.3%),⁹ Another Indian studies by Kulkarni et al. (70.2%)¹⁰ observed much higher rates. Last NFHS-

3 data of India and Gujarat shows 46.3% and 47.8% of infants in 0–5 months of age exclusively breastfeed. And from the 6th month onwards 55.8% and 57.7% of infants received complementary feeding in India and Gujarat, respectively.¹¹ There was another study by Murad Hossain (2018) where he presented BDHS 2016 report which showed it was 55%. The prevalence of Exclusive Breast Feeding in Bangladesh according to this study was higher than that reported in some other countries such as Egypt (9.7%),¹² India, (34%), Saudi Arabia (24.4%)¹³ and the USA (16.8%).¹⁴ But the prevalence of exclusive breast feeding was found higher in some other parts of the world such as Malaysia (Peninsular, 43.1%),¹⁵ Southern Ethiopia (46.5%),¹⁶ Northwest Ethiopia (50.3%), Debre Markos of Northwest Ethiopia (60.8%), Western India (61.5%) and the Goba district of South East Ethiopia (71.3%).¹⁷

The practice of feeding colostrum has improved in the past decade (53.33%) and 55.83% of mother have idea about exclusive breast feeding that is only breastfeed for the first six months of life, among them 42.50 % of mother was found to breast feed exclusively in our current study.¹⁸

In present study as 17.50% mother use honey just after birth as prelacteal food. Almost similar findings also showed by Mohidul Islam (2013) only 21% of studied mothers were shown to give pre-lacteal feed. The use of honey and other sweet item as pre-lacteal feeding were more common as a cultural believe that the first milk is dirty and as a believer to give honey. The potential contamination for pre-lacteal feeding is more and there are chance of developing allergic manifestation in the future life.¹⁹ According to Sumera Ali (2011) study showed that giving sweet pre-lacteals is thought to be related to the belief that these will ensure a pleasant personality.²⁰

Mothers' education and occupation were found inversely proportional to Exclusive Breast Feeding practice in many studies. Maternal education plays a huge role in increasing the receptivity of mothers towards correct practices. Studies from India have suggested significant association of maternal literacy and timely initiation of complementary feeding. Lower literacy in mothers, in addition to lack of knowledge about correct practices and recommendations, makes routine counseling by community health workers also ineffective.²¹

Present study showed 33.33% mother completed their primary education whereas only 2.50% graduate and among them 56.67% were housewife whereas 20.83% were service holder. According to Edite Pintoa (2017) Women with low literacy levels have a lower maternal affection.⁵ Faleiros et al. (2006) indicate that educational

level affects motivation for breastfeeding because of the possibility of having greater access to information about its advantages.²²

It could also be seen that there is less affection in women whose education is below the secondary level (136.55) and more affection in women who have secondary education (105.51).⁵

A study conducted by Murad Hossain (2018) showed illiterate mothers were more likely to provide Exclusive Breast Feeding to their infants and the practice rate of Exclusive Breast Feeding was significantly reduced with the increase in mothers' educational status.⁶ These findings are in agreement with the findings of at Saudi Arabia, Bahir Dar district Ethiopia, Debre Berhan district Ethiopia, Debre Markos district Ethiopia, Goba district Ethiopia, Peninsular Malaysia and Tamil Nadu India.¹³ This could be explained as the fact that educated mothers have better job opportunities in Bangladesh and they are likely to join services. Therefore, educated and employed mothers may not have or may not be able to manage sufficient time during working hours to breastfeed their infants.

A study by Dipen V Patel (2015)⁸ did not find significant association of maternal occupation with initiation of breastfeeding and duration of exclusive breastfeeding despite housewives supposedly having more time available to feed their infants. One of the probable reasons for this is that working mothers carry their children at workplace and they are able to provide breastfeeding.

Regarding knowledge about exclusive breast feeding present study showed 55.83% mother have knowledge whereas a study by Alessandra Marcuz de Souza Campos et al (2015) 30% of the respondents reported feeding their children other liquids in addition to breast milk, which suggests a lack of understanding of the EB concept.²³ These findings are supported by the results of other studies; study conducted in Horizonte, Ceará, 89% of the participants admitted that the proper duration of EB is six months.⁴ The Ethiopia Demographic and Health Survey 2016 (EDHS) shows breast feeding within one hour of birth does not vary significantly by the type of assistance at delivery. The likelihood that a child is breastfed in the first hour after birth increases with the mother's educational status and wealth quintile.⁷

Conclusion:

Breastfeeding is a complex process and awareness about exclusive breastfeeding is influenced by antenatal care, postnatal care and initiation of breastfeeding within 1st hour of life, having attended formal education.

Reference:

1. Al-Ruzaihan S et al. Effect of maternal occupation on breast feeding among females in Al-Hassa, southeastern region of KSA. *Journal of Taibah University Medical Sciences* (2017); 12(3), 235-240
2. Elyas L, Mekasha A, Admasie A, and Assefa E. Exclusive Breastfeeding Practice and Associated Factors among Mothers Attending Private Pediatric and Child Clinics, Addis Ababa, Ethiopia: A Cross-Sectional Study. *Hindawi International Journal of Pediatrics* Volume 2017; Article ID 8546192, 9 pages.
3. Joel A B.Appraisal of Nursing Mothers' Knowledge and Practice of Exclusive Breastfeeding in Yobe State, Nigeria. *Journal of Biology, Agriculture and Healthcare..* Vol.3, No.20, 2013 page.
4. Marcuz A et al. Exclusive breastfeeding practices reported by mothers and the introduction of additional liquids. *Rev. Latino-Am. Enfermagem* 2015 Mar-Apr;23(2):283-90.
5. Pintoa E, Chavesa C, Duartea J, Nelasa P & Coutinhoe E. Maternal affection and motivation for breastfeeding. *Procedia - Social and Behavioral Sciences* 217 (2016); 1028 – 1035.
6. Hossain M et al. Exclusive breastfeeding practice during first six months of an infant's life in Bangladesh: a country based cross-sectional study. *BMC Pediatrics* (2018); 18:93
7. Lenja A, Demissie T, Bereket Y and Yohannis M. Determinants of exclusive breastfeeding practice to infants aged less than six months in Offa district, Southern Ethiopia: a cross-sectional study. Lenja et al. *International Breastfeeding Journal* (2016); 11:32 page.
8. Patel V D et al. Breastfeeding Practices, Demographic Variables, and Their Association with Morbidities in Children. *Advances in Preventive Medicine* Volume 2015 page.
9. D. Kumar, N. K. Goel, P. C. Mittal, and P. Misra, "Influence of infant-feeding practices on nutritional status of under-five children," *Indian Journal of Pediatrics*, vol. 73, no. 5, pp. 417–421, 2006.
10. Kulkarni RN, Anjenaya S, Gujar R. Breast feeding practices in an urban community of Kalamboli, Navi Mumbai. *Indian J Community Med.* 2004;XXIX:179–80.
11. F. Arnold, S. Parasuraman, P. Arokiasamy, and M. Kothari, *Nutrition in India*, International Institute for Population Sciences, Mumbai, India, 2005.
12. Radhakrishnan S, Balamuruga SS. Prevalence of exclusive breastfeeding practices among rural women in Tamil Nadu. *International Journal of Health & Allied Sciences.* 2012;1(2):64. doi: 10.4103/2278-344X.101667.
13. El-Gilany A-H, Shady E, Helal R. Exclusive breastfeeding in al-Hassa, Saudi Arabia. *Breastfeed Med.* 2011;6(4):209–213.
14. Jones JR, Kogan MD, Singh GK, Dee DL, Grummer-Strawn LM: Factors associated with exclusive breastfeeding in the United States. *Pediatrics* 2011;ped. 2011–0841.
15. Tan KL. Factors associated with exclusive breastfeeding among infants under six months of age in peninsular Malaysia. *Int Breastfeed J.* 2011;6(1):1 page.
16. Echamo M. Exclusive breast feeding in Arbaminch, SNNPR, Ethiopia. *Harar Bull Health Sci.* 2012;5:44–59.
17. Seid AM, Yesuf ME, Koye DN. Prevalence of exclusive breastfeeding practices and associated factors among mothers in Bahir Dar city, Northwest Ethiopia: a community based cross-sectional study. *Int Breastfeed J.* 2013;8(1):1.
18. Gdalevich M, Mimouni D, David M, Mimouni M. Breast-feeding and the onset of atopic dermatitis in childhood: a systematic review and meta-analysis of prospective studies. *J Am Acad Dermatol.* 2001;45(4):520–527.
19. Islam M et al, Effect of maternal status and breastfeeding practices on infant nutritional status - a cross sectional study in the south-west region of Bangladesh. *Pan African Medical Journal.* 2013; 16:139 doi:10.11604/pamj.2013;16.139.2755.
20. Ali S. Perception and practices of breastfeeding of infants 0-6 months in an urban and a semi-urban community in Pakistan: a cross-sectional study. *Vol. 61, No. 1, January 2011* page.
21. Patel V D Et al. Breastfeeding Practices, Demographic Variables, and Their Association with Morbidities in Children. *Advances in Preventive Medicine* Volume 2015; Article ID 892825, 9 pages.
22. Faleiros, F. T., Trezza, E. M., & Carandina, L. (2006). Aleitamento mateno: factores de influência na sua decisão e duração. *Revista de Nutrição*, pp. 623-630.
23. Campos de A M S, Chaoul C de O, Carmona E V, Higa R, and Vale I N do. Exclusive breastfeeding practices reported by mothers and the introduction of additional liquids, *Rev Lat Am Enfermagem.* 2015 Feb-Apr; 23(2): 283–290.