



ASSESSMENT OF EPIDEMIOLOGICAL FACTORS AFFECTING AWARENESS OF MOTHERS REGARDING BREASTFEEDING IN CHANDIGARH.

Community Medicine

Navpreet Kaur	MPH Student, Panjab University Chandigarh
Dr N K Goel	Prof. & Head, Community Medicine Govt. Medical College & Hospital Chandigarh
Dr Manoj Kumar	Assist Professor Centre of Public Health Panjab University, Chandigarh
Dr Meenu Kalia*	Assist. Professor, Community Medicine Govt. Medical College & Hospital Chandigarh *Corresponding Author

ABSTRACT

Background: Breastfeeding is generally considered by health professionals as the ideal feeding practices for infants. It is the first communication pathway between the mother and her infant.

Objectives: 1. Assessment of epidemiological factors affecting awareness of mothers regarding breast feeding. 2. To find the knowledge and attitude of mothers regarding feeding practices. 3. To determine the gap between the knowledge and feeding practices among mothers.

Methodology: All females attending immunization clinic in UHTC AND RHTC between January 2017 to April 2017 and willing to participate in the study were taken as study subjects. Convenient sampling technique was used.

Results: Mothers participated in the study fall in age group of 26 to 30 years. 59 (29.5%) mothers are less educated i.e. up to metric. Out of working mother only 27 (79.41%) were given private place for breast feeding. 186 (93.0%) mothers were counselled at the time of delivery regarding the frequency and duration of breastfeeding practices. Majority of the children i.e 182 (91.0%) were given Colostrum as a first feed. 95 (47.5%) mothers initiated breastfeeding after 24 hours due to lack of milk formation and thickness of breast milk. 92 (46%) mothers gave exclusive breastfeed to their babies, 59.5% babies were given mixed feed (breast milk and cow's milk) as a complimentary feed. 90.00% of the mothers believed that breast milk contains all the essential nutrients for a newborn child.

Conclusions: Mothers were highly knowledgeable about breastfeeding. They were able to recognize the benefits of breastfeeding and the importance of Colostrum. The exclusive breastfeeding rate was low. The main factors observed that interfere with exclusive breastfeeding are the perception of mothers that the breast milk is not adequate and being thick for the baby. Delay in initiation of lactation is due to caesarean section and neonatal illness and hospitalization.

KEYWORDS

Colostrum, lactation, breast feed, counselling

Introduction

Historically, breastfeeding has generally been considered by health professionals as the ideal feeding practice for infants. It is the first communication pathway between the mother and her infant. Previous studies confirm that breastfeeding has advantages for both babies and mothers, including providing the needed nutrition for the babies, boosting the baby's immune system, helping mothers to lose weight after pregnancy, and stimulating the uterus to return to its previous position before pregnancy. In addition, infants can absorb and digest breast milk more easily than baby formula¹.

Breast feeding is a normal way of providing young infants with nutrients they need for healthy growth and development. Colostrum, the yellowish, sticky breast milk produced at the end of pregnancy, is recommended by WHO as a perfect food for the newborn, and feeding should be initiated within the first hour after birth. Exclusive breastfeeding is recommended up to 6 months of age or beyond².

Breast feeding is the process by which milk is transferred from the maternal breast to the infant. Breast milk composed of protein, fat, carbohydrate, minerals and water. According to American Academy of paediatrics on nutrition (1992) the only supplement breast – feed baby will need is vitamin D and fluoride at the beginning of 6 months of age³. Colostrum is referred as “liquid gold” and it is an ideal food for baby as it is high in protein, low in sugar and fat thus making it easy to digest. This is rich in antibodies which provides protection from many gastro intestinal and respiratory diseases.⁴

After birth the health of the baby depends upon the feeding practices adopted by mother. For optimal maternal and child health and nutrition, all women should be encouraged and enabled to practice exclusive breast feeding, and all infants should be exclusively breast fed, from birth to six months of age. Complementary feeding means feeding solid / semi solid food along with breast milk after the age of six months, as after 6 months breastfeed is no longer sufficient to meet the nutritional demand of infants. At the age of 6 months children have high nutritional needs for rapid growth and development. Inadequate complimentary feeding lacking in quality and quantity can restrict

growth and development. The practice of breastfeeding is declining with urbanization, infant milk substitute and working of women. Government of India came up with the infant milk substitute feeding bottle and infant food (Regulation of production supply and distribution) act 1992 as an initiative to improve breastfeeding. This act provides for the regulation of production supply and distribution of infant milk substitute with the view to the protection and promotion of breastfeeding and ensures the proper use of infant foods. “Infant milk substitute” means any food being marketed or represented as a partial and total replacement of mother's milk for infant 'supplements to the age of two years.⁵

Despite many studies have been done in past decades regarding breast feeding practices in India, its practice remains suboptimal. This study was conducted to assess the current time knowledge and attitude of mothers towards breastfeeding with the aim of assessing epidemiological factor affecting breast feeding of infants by mothers in Chandigarh.

Methodology

A community Based Cross Sectional Study was conducted in field practice area of the department of community medicine i.e. UHTC, sec 44 and RHTC, sec 56 of Chandigarh using convenient sampling technique. Participant of the study were the mothers of children below 1 years of age residing in the field practice area who came to attend immunization clinic in urban health training centre and rural health training centre in Chandigarh. The data was collected by visiting UHTC & RHTC using pre-designed and pre tested questionnaire. The participants were interviewed after establishing rapport with them. Information regarding socio-demographic profile, education of mother, occupation of mother, natal care, knowledge about infants, and feeding practices including breastfeeding and complementary practices was collected from the mothers. Data entry and analysis was done in Microsoft office excel 2007 and SPSS. Analysis was done using frequency, percentage and mean. Chi square was used as test of significance taking level of significance, $p > 0.05$.

Results:

Table 1 : Demographic variable of mothers.(n= 200)

Variable	Number	Percentage
AGE		
15 to 20 years	32	16
21 to 25 years	79	39.5
26 to 30 years	89	44.5
EDUCATION		
Upto 10 th	59	29.5
Upto 12 th	48	24.0
Graduate	50	25.0
Post graduate	43	21.5
SOCIOECONOMIC STATUS		
Upper class	4	2
Upper middle class	32	16
Middle class	34	17
Lower upper class	78	39
Lower class	52	26
EMPLOYMENT		
Working	32	16
Non working	168	84
MODE OF DELIVERY		
Normal	105	52.5
Cesarian section	95	47.5
BIRTH ORDER		
First	132	66
More than two	68	34

Mothers participated in the study fall in age group of 26 to 30 years. 59 (29.5%) mothers are less educated i.e. up to matric. Majority of mothers were belonging to upper lower class 78(39.0%). (84.0%) mothers were non-working. Out of working mother only 27 (79.41%) were given private place for breastfeed.

Table2: Distribution of participant according to the knowledge of feeding practices. (n=200).

Knowledge variable	Number	Percentage
Whether breastfeed is initiated within half an hour of birth		
Yes	190	95.0
No	10	5.0
Colostrums is beneficial for the baby		
Yes	179	89.5
No	21	10.5
Whether breastfeed is nutritious for baby or not		
Yes	180	90.5
No	20	9.5
Whether breastfeed should effect the weight of the mother		
Yes	186	93.0
No	14	7.0
Whether breastfeed should improve your uterus involution		
Yes	194	97.0
No	6	3.0
Whether breastfeed and formula have same benefits		
No	10	5.0
Yes	190	95.0

90% of the mothers believed that breast milk contains all the essential nutrients for a newborn child and Colostrum contains essential antibodies necessary to help the child's immune system. 95% mothers were of the opinion that breast milk and formula feed have same benefit.

Table 3: Distribution of participants according to the Feeding Practices (n=200)

Variable	Number	Frequencies
Duration of hospital stay		
1 day	16	8
2 day	20	10
3 day	74	37

Upto 5 days	90	45
Counselling		
Yes	186	93
No	14	7
First feed		
Colostrum	182	91
Others like honey	18	9
Feeding initiation		
1 to 3 hours	60	30
4 to 8 hours	45	22.5
Upto 24 hours	95	47.5
Reason for the delay		
No delay	60	30
Less milk	45	22.5
C section and weakness	95	47.5
Exclusive breastfeed		
Yes	92	46
No	108	54
Complementary feed		
Cows milk	65	32.5
Others	15	7.5
Mixed feed	119	59.5
Method of feeding		
Bottle	190	95

Majority of mothers 90 (45.0%) were hospitalised up to 5 days at the time of delivery and 186 (93.0%) mothers were counselled at the time of delivery regarding the frequency and duration of breastfeeding practices. Majority of the children i.e 182 (91.0%) were given Colostrum as a first feed. 95 (47.5%) mothers initiated breastfeeding after 24 hours. 92 (46%) mothers gave exclusive breastfeed to their babies, 59.5% babies were given mixed feed (breast milk and cow's milk) as a complimentary feed.

Discussion:

Half of the mothers were taken from urban area and other half from rural area. Majority of the children 81 (40.5%) were in the age group 7to9 months. Female children were (55%). 141 (70.5%) having birth weight more than 2.5 kg. 105 (52.5%) had normal type of delivery .132(66.0%) mothers had first child with new experience.

In the present study 44.5% mothers were aged between 26 to 30 years at the time of survey followed by mothers 39.5% in the age group of 21 to 25 years .Similar findings were observed by Pal AC⁶ 2014 with mean age group of participant as 26.7 years .Almost one fourth of the mothers were educated up to graduation level and 24% were educated up to secondary level whereas in the study done by Maiti A⁷, 35.66% mothers were educated up to secondary level and only 11.89 % were illiterate. In the present study, 84% listed their occupation as homemakers and similarly findings were seen by Pal AC⁶. The socioeconomic status of 39% mothers was upper lower class. Out of 16% mothers who were working, 13.5% reported that their workplace manager provided suitable place for breast-feeding. More than mothers had normal delivery which is similar to the study done by Pal AC⁶. 66.66% children were born with normal birth weight and 70.0% of the infants were the first child of the mother.

In the present study, 30% mothers actually initiated breastfeeding within one to three hours which is similar with 34.8% as found in DLHS(IV)2014- 15, However in study by Maiti A⁷ found that almost 48% mothers initiated breastfeeding in early hours. In our study majority of the mother 93% were counselled about breastfeeding which was much higher than the findings of Kaur M⁸. This may be due to the reason that the study subjects in our study were regularly visiting health centres where counselling is done on various aspects. It was found that in the study 90% mothers gave colostrums to babies. However studies conducted by Noor S⁹ in slum area of Rourkela, Maiti A⁷ in Odisha found lower rates of colostrums feeding i.e 77.6% and 74.8% respectively. This highlights the importance of counselling to provide awareness among women regarding colostrums.

In the study 46 % were given exclusive breast feeding, (In rural feeding practice was 27% and in urban it was found to be 19%).which is similar to that of NFHS 4(2014- 2015)¹⁰; despite the rise in institutional deliveries to 79% nationally, the number of children breastfeed is less than 42% . In other studies the rate of exclusive

breastfeed for six months was found to be 61% by Maiti A⁷ and 22% in a study conducted in Shimla¹¹. Kumar SMV¹² found exclusive breast feeding to be 60% in rural and 47.6% in urban areas. The findings of our study are quiet high from DLHS-IV¹³ for Chandigarh in which it was found to be of 28.8%. Age of the mother , education socioeconomic status ,type of family ,place of delivery and education about benefits of breastfeeding influenced the breastfeeding practices. The main factors found in the study for less exclusive breastfeeding were perception of the mother that either milk output is less or it is too thick leading to constipation in infants which is similar to the findings of PalAC⁶.

It was found that though the knowledge about importance of breast feeding was quite high among the mothers participating in the study but the gap exists in bringing this knowledge into practice. This may be because of the various misconceptions that mothers or other family members have regarding breast feeding. This shows the importance of spreading awareness regarding importance of breast feeding among ante-natal females and at the time of delivery.

Conclusion:

Findings from this research indicate that the mothers were highly knowledgeable (90%) about breastfeeding and able to recognize the benefits of breastfeeding and the importance of Colostrum. The exclusive breastfeeding rate was low (46%) and early initiation of breastfeeding rate 30%. The main factors observed in this study interfering with exclusive breastfeeding were the perception of mothers that the breast milk was not adequate and being thick for the baby. Delay in lactation was mainly due to caesarean section and neonatal illness and hospitalization.

References:

1. Tanash, Hadeel Adnan, "Breastfeeding knowledge, practice, attitudes, and influencing factors in mothers in Bemidji(2014),Minnesota: <http://cornerstone.lib.mnsu.edu/etds>.
2. World Health Organization WHO. (2013). Breastfeeding. Retrieved from World Health Organization Organization WHO<http://www.who.int/topics/breastfeeding/en/> (Cited on 26th February 2017).
3. Dutta"Text Books of Obstetrics", (2004), 6th EDITION, New central book agency Pvt. Ltd Calcutta. . 438-454.(Cited on 12th March 2017)
4. O.P.GHAI "The essentials of pediatric nursing", (1999), 4th edition Jaypee publications, 232-236.(Cited on 12th March 2017)
5. The Infant Milk Substitute, Feeding bottles and infant foods (Regulation of production ,supply and distribution)act 1992 as amended in 2003 (IMS Act) available form <http://www.bpni.org/documents/IMS-act.pdf>(cited on 12th march 2017).
6. Pal AC, Mukhopadhyay DK. Knowledge, attitude and practice of breastfeeding in a rural community of Bankura District, West Bengal, India. IOSR J Dental Med Sci.2014;13(11): 24-8.
7. Maiti A, Sarangi L, Sahu SK, Mohanty SS. An assessment on breast feeding and weaning practices in odisha, india. American J Pub Health Res. 2015;3(4A): 49-52.
8. Kaur M, Kumar M, Sharma VL. Infant and Young Child feeding practices among the Lactating Mothers: A Cross-SECTIONAL Study in a village of CHANDIGARH. Int Multidisciplinary Res .2014;1(4): 1-6.
9. Noor S, Rajesh AH, Babu GK. A study on breast feeding practices among mothers of urban slums of Rourkela. J Dental and Med Sci. 2015;14(5): 77-80.
10. International Institute for population science (IIPS) and Macro International .2007.National Family Health Survey (NFHS-4).
11. Prashar A, Sharma D, Thakur A, Mazta SR. Infant and young child feeding practices- insights from a cross-sectional study in a hilly state of north India. Int J NutrPharmacolNeurol Dis. 2015; 5(3): 103-7.
12. Kumara SMV, Muralidhar K. A study on Breast Feeding practices in rural and urban Warangal, Andhra Pradesh. J Health Sci. 2015; 3(1): 73-5.
13. International Institute for Population Science (IIPS). District level household and facility surver (DLHS-4), 2012-13: India. State Fact Sheet Chandigarh. Mumbai: IIPS.