

Original Research Article

Exclusive breast feeding: a cross sectional survey about knowledge, attitudes and practices among lactating mothers in Pilkhuwa, Hapur

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ABSTRACT

Background: Exclusive breast feeding is a basic human activity, vital to infant and maternal health and of immense economic value to households and societies. Studies in India have also shown a decline in breastfeeding trends, especially in urban areas. The WHO recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development, and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more. Thus the present study was developed to examine the infant feeding practices, knowledge and attitude towards breast feeding among postnatal mothers.

Methods: This was a cross sectional study carried out among post natal mothers who attended immunization clinics with their children for vaccination and for the treatment of other minor illnesses at a UHTC (Urban Health Training Centre).

Results: Sixty three percent mothers were aware about exclusive breast feeding. Hospital/health facilities were the main source of information. A significant decrease about misconceptions and significant increase in knowledge occurred about exclusive breast feeding, in post testing.

Conclusions: Promotion of women's education, husband's engagement, encouraging antenatal care and exclusive breastfeeding counselling during antenatal care were recommended to improve exclusive breastfeeding practice.

Keywords: Attitude, Exclusive breast feeding, Knowledge, Postnatal mothers, Practice

INTRODUCTION

Exclusive Breast Feeding (EBF) is defined as infant feeding with human milk without the addition of any other liquids or solids.¹ The WHO recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development, and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more.² Breastfeeding is a basic human activity, vital to infant and maternal health and of immense economic value to households and societies.³ The benefits of breast-feeding, to both mother and baby, have long been recognized.⁴ Despite strong

evidences in support of EBF for the first six months of life, its prevalence has remained low worldwide and it is estimated that only about one-third of infants were exclusively breastfed for the first six months of life.⁵⁻⁷ Studies in India have also shown a decline in breastfeeding trends, especially in urban areas poor practices and attitudes toward exclusive breastfeeding have been reported to be among the major reasons for poor health outcomes among children, particularly in developing countries. Nonetheless, the promotion and acceptance of practices, such as exclusive breastfeeding, are especially important in developing countries with high levels of poverty, and that are characterized by a high burden of disease and low access to clean water and

adequate sanitation.⁸ Early initiation of breastfeeding is not seen in over 75% of the nation's children and over 50% of children are not exclusively breastfed.⁹ Further, the Government of India has undertaken National Health Mission, which intends to implement Integrated Management of Neonatal and Childhood Illnesses (IMNCI) through the existing healthcare delivery system.¹⁰ Breastfeeding has declined worldwide in recent years, as a result of urbanization and maternal employment outside the home. Hence, the low figures for early initiation of breastfeeding in India are a matter of urgent concern. Although, the practice of breast feeding is influenced by various social, cultural and religious beliefs, maternal infant feeding attitude has been shown to be a stronger independent predictor of breastfeeding initiation.¹¹ Thus, the present study was developed to examine the infant feeding practices, knowledge and attitude towards breast feeding among postnatal mothers.

METHODS

This was a cross sectional study carried out among post natal mothers who attended immunization clinics with their children for vaccination and for the treatment of other minor illnesses at a UHTC (Urban Health Training Centre), a field practice area under community medicine department functioning under a teaching hospital at Pilkhuwa, Hapur during the month of January 2020.

Inclusion criteria

Mothers willing to participate and without major abnormality, new born age between 37 and 42 gestation weeks, mothers of healthy infants aged 6 months were included in the study.

Mothers were interviewed attending the outpatient department of UHTC with their children. Total 102 mothers were interviewed during working days of January month of 2020.

Written consent was obtained from the participants and they were given freedom to quit the study. Assuring the participant's about the confidentiality. After obtaining the permission from hospital authorities and ethical clearance from ethical committee, all mothers were given an

explanation of purpose of the study. A predesigned, pre-tested, anonymous, self-administered questionnaire in local language was used for data collection before the intervention. The questions were explained to them and they were asked to write answers of the questions on their own. Questionnaire includes questions related to knowledge, misconception, and attitude about exclusive breast feeding. The intervention was showing an animation film in Hindi on exclusive breast feeding after showing the film the same questionnaire was again filled by the mothers.¹² After the session the queries of the mothers were asked and solved. The responses collected were analyzed using appropriate statistical methods using MS Excel. The relationship between knowledge attitude and misconception with socio-demographic variables was tested by using correlation, Z tests.

RESULTS

Out of the total 102 mothers who had children less than 2 years of age, majority (74.1%) were within the age group of 20-30 years, 23.02% were aged more than 30 years and 2.87% were less than 20 years. Amongst 102 mothers, 65 (63.72%) mothers heard about exclusive breast feeding. Health care sectors were the commonest source of information in these mothers (Table 1). Around 39.5% of the mothers were degree holder, and only 2.8% were illiterate.

Table 1: Distribution of mothers according to their source of information about exclusive breast-milk.

Source of information	Number of mother	Percentage
Hospitals	61	59.8
Family	15	14.7
Posters	8	7.84
Radio /TV	8	7.84
Newspaper	5	4.9
Friends	5	4.9
Total	102	100

More than 60% mothers were aware about the importance of exclusive breast milk, this percentage increased significantly after viewing the film (Table 2).

Table 2: Distribution of mothers according to their knowledge about importance of exclusive breast milk.

Question with correct responses	Pre-test	Post-test	Z value	P value
Breast milk is complete food of new borne (Yes)	63 (61.76%)	86 (84.31 %)	3.75	<0.05
Breast milk have full of nutrient for new borne baby (Yes)	68 (66.66%)	84 (82.35%)	2.61	<0.05
Breast feeding should be initiated within one hour of the baby being born (Yes)	63 (61.76%)	81 (79.41%)	2.81	<0.05
Exclusive breast feeding for 6 month is ideal (Yes)	67 (65.68%)	82 (80.39%)	2.40	<0.05
Brest feeding should be done as and when the baby demands (Yes)	50 (49.01%)	74 (72.54%)	3.54	<0.05
Colostrum should be given to new borne or not (Yes)	66 (64.6%)	84 (82.34%)	2.6	<0.05
Colostrum is beneficial to new borne or not (Yes)	28 (27.45%)	85 (83.33%)	2.79	<0.05

Table 3: Distribution of mothers according to their change in knowledge about misconception of exclusive breast feeding.

Question with correct responses	Pre-test	Post-test	Z value	P value
There is no milk in the first few days (No)	50 (49.01%)	90 (88.23%)	6.14	<0.01
Babies need to nurse every -hours (No)	49 (48.03)	87 (85.29)	5.67	<0.01
Frequent nursing leads to poor milk production (No)	46 (45.09%)	82 (80.39%)	5.08	<0.01
Discontinue breastfeeding if your baby has diarrhea or vomiting (No)	22 (21.56%)	81 (79.41%)	9.91	<0.01
Modern formulas milk are almost the same as breast milk (No)	28 (27.45%)	80 (78.33%)	9.06	<0.01

Table 4: Distribution of mothers according to their change in attitude about breast feeding.

Questions	Pre-test	Post-test	Z value	P value
Breast milk is less expensive than formula	68 (66.66%)	85 (83.33%)	2.80	<0.01
Breast-feeding increases mother-infant bonding	71 (69.60%)	86 (84.31%)	2.25	<0.01

More than 50% mothers were having misconceptions about exclusive breast milk which reduces significantly after viewing the film. The number of correct responses increased significantly after the intervention (Table 3). The attitude of mothers about exclusive breast feeding was found to be good which again enhanced after intervention (Table 4).

DISCUSSION

In present study, 63.72% mothers were aware about exclusive breast feeding, while Alamirew et al from Ethiopia noticed 82%, Singh et al from Jalandhar, Punjab noticed 91.4%.^{13,14} In another study by Menon et al 82.5% about same results were reported by different author Gurung et al (87.9%), Vijayalakshmi et al (85.2%) and Chinnasamib et al, Sundar et al (80%), while Tadele et al reported higher awareness i.e. 93.6%.¹⁵⁻¹⁹

Hospitals (59.8%) was the commonest source of information in the present study followed by family. Family as a source of information was mentioned by 14.7% mothers revealing probably less knowledge amongst parents. Posters and radio indicating less source of information about exclusive breast feeding but radio/TV cannot be ignored because they are also adding in knowledge of mothers.

In Ethiopia, Alamirew et al mentioned that 66.4% participants acquired information about exclusive breast feeding from the health institutions. Similar finding were mentioned by other authors as Singh et al (57.4%), Gurung et al (48.6%), Tadele et al (62.7%) i.e. health sectors were the centre for information.^{13,14,16,19} Regarding knowledge about breast milk is complete food of new borne 61.76% students were aware about yes it is complete food which was significantly increased to 84.31% after viewing film. But in study by Gurung et al knowledge was higher (77.1%) than present study.¹⁶ Breast milk have full of nutrient for new borne baby was revealed by 66.66% mothers in pretest which

significantly increased to 82.3% in post-test. The less (28.7%) in knowledge regarding breast milk have full of nutrient for new borne baby was also revealed by Gurung et al while they also mentioned that about 57.4% mothers written don't know.¹⁶ Breast feeding should be initiated within one hour of the baby being born was opined by 61.76% mothers in pre-test and was significantly improved to 79.41% after the film.

Lower i.e. 28.7% mothers of Ethiopia were aware about this timing of initiation of breast feeding reported by Alamirew et al while study by Krishnendu et al given about similar knowledge level as in this study (68.3%).^{13,15} Gurung et al reported 59.3% mothers were aware that it should be started within one hour which is near to similar finding as this study (61.76%).¹⁶ Tadele N et al reported that 59.9% mother opined that breast feeding must be started within 1 hours after delivery.¹⁹

One of the various knowledge about EBF (Exclusive Breast Feeding) i.e. Exclusive breast feeding for six month is ideal, 65.68% mothers had knowledge about this fact before viewing the film and which was further improved to 80.39%. Singh et al found only 57.4% mothers were aware about EBF should be continued up to 6 months is a key factor for prevention of many diseases like diarrhea/upper respiratory tract infection.¹⁴ Krishnendu et al and Gurung et al reported in their different study about duration of exclusive breast feeding to new borne 30.8%, 77.1% mothers responded six months respectively.^{15,16}

More than half mothers were aware about breast feeding should be done and when the baby demands in pretest which increased significantly after just viewing film, gives film as an important mode for improving knowledge of mothers. Knowledge about colostrum should be given to new borne or not, 64.6% participants responded positively in pretest and the knowledge was improved by 82.34% which is statistically significant. Gurung et al 53.6% respondent answered colostrum

should not be discarded.¹⁶ 60.2% mothers in a study by Tadele et al reported that he should be given to newborn absolutely.¹⁹ In pretest proforma only 27.45% mothers were knowing that colostrum is beneficial for newborn and knowledge was improved after the intervention (83.33%). In the view of knowledge about benefits of colostrum Krishnendu et al reported that 58.3% mothers were knowing that colostrum is beneficial to newborn which is higher than present study.¹⁵

There are lots of misconceptions about EBF amongst the mothers. So, it is pertinent to study misconceptions about the EBF. If these misconceptions continued it reflect in the behavior of people towards exclusive breast feeding. Misconception about there is no milk in the first few days 50 (49.01%) mothers mentioned correct answer i.e. No. Which was significantly improved to 90 (88.23%) after seeing the film. Vijayalakshmi P mentioned that 45.77% respondent written that it starts immediate after the birth.¹⁷ Next very important myth is babies need to nurse every hours, correct response i.e. No, was revealed by 48.03% mothers which was significantly improved to 85.29% after viewing film. A study by Krishnendu et al 60.9% mothers were agree that breastfeed should be on demand.¹⁵ Gurung et al in his study stated that frequency of breastfeeding should be on demand (55%).¹⁶ During pre-test only 45.09% student opined that frequent nursing leads to poor milk production which was improved by 80.39%. Vijayalakshmi et al in their study revealed that 59.8% mothers were knowing the facts that frequent nursing doesn't affects the milk quality.¹⁷ Misconception about breast feeding should be initiated within one hour of the baby being born. 21.56% mothers mentioned correct answer i.e. Yes, which was significantly improved to 81 (79.41%) after watching the film. In the study of Singh et al 42.8% participants were given answer yes which was higher than the present study.¹⁴ Regarding misconception about discontinue breastfeeding if your baby has diarrhea or vomiting the number of mothers having correct knowledge improved to 81 (79.41%) from 22 (21.56%). About 35% mothers knowing this fact accurately in a study by Krishnendu et al also reported that only 42.8% mothers know that EBF prevents child from diarrhea similar misconceptions have also been reported by other studies like Tadele et al 36.1% respectively.¹⁵⁻¹⁹ In this study only 27.45% mothers knew the fact that formula milk is not equivalent to breast milk before the intervention and after intervention number increased to 78.33%. In the study of Singh et al 28.7% opined that formula milk is not better than EBM.¹⁴ Krishnendu et al also mentioned that 65.8% of women were disagreed that formula feeding is better than breastfeeding.¹⁵ Mothers in the present study had a favorable attitude towards EBF when asked about the breast milk is less expensive than formula 66.66% opined yes which further significantly increased to 83.33%. In study by Krishnendu et al majority (65.8%) of mothers had a favorable attitude that breast milk is less expensive than formula.¹⁵ Breast-feeding increases mother-infant bonding, 69.60% opined yes in pretest

which further significantly increased to 84.31% after viewing film. Having positive/good attitude toward EBF is good sign dealing to decrease misconception and increase knowledge about EBF. There are various ways of health education starting from lecture to group discussion. The present study used a different approach of showing a film considered to be a one way method of communication. This method would be very useful tool in increasing awareness about EBF in adolescent girls going to school also. The post test was done immediately after the viewing the film so it is needed to study again the knowledge retained by these students regarding EBF.

CONCLUSION

The prevalence of knowledge about exclusive breastfeeding was very low compared to recommendations of infant and young child practice, to be exclusively breastfed for the first six months of life. Mother's lack of formal education, less income, being female child, less ANC (ante-natal care) visit, and lack of support from husband may be statistically associated with low level of knowledge about exclusive breastfeeding practice. Promotion of women's education, husband's engagement, encouraging antenatal care and exclusive breastfeeding counselling during antenatal care should be recommended to improve exclusive breastfeeding practice.

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