

Original Research Article

Impact of Lactation Counseling To Mothers on Breast Feeding Practices

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Abstract

Background: Breastfeeding is the healthiest way to feed a baby. Like mothers love there is no substitute for breast milk. Despite of benefits of breast feeding, the breast feeding incidence and the duration of exclusive breast feeding all over world is not satisfactory. In India though breastfeeding is almost universal, the prevalence of exclusive breastfeeding as per WHO recommendation is not up to the expectations. Over one million infants worldwide die every year because they are not breastfed or because they are given other foods too early. The determination of indicators and variables related to exclusive or overall breastfeeding duration can be a valuable instrument when planning local actions and policies aimed at improving breast feeding rates.

Aim: To assess the knowledge, attitude and practices of mothers regarding breast feeding and to determine the impact of lactation counseling to mothers around the time of delivery on breast feeding practices.

Material and Methods: Our study was a single center cross sectional questionnaire based study conducted in a Teaching Hospital in Telangana state in India. Duration of study was from October 2016 to September 2018. It was conducted upon 600 (n=600) women i.e. Expectant mothers admitted in antenatal wards and mothers in labour room and postnatal wards of our hospital, who were otherwise healthy. These women were randomly divided in to two groups Group A and Group B. Group A (n=300), Women interviewed after delivery with a preset questionnaire which included 22 questions pertaining to knowledge, attitude and practices of breastfeeding. For Group B (n=300), women brief counseling was given just before delivery in the antenatal wards or in the labour room. Counseling was done by women who were appointed as support staffs under NRHM. These women were given basic training on ideal breastfeeding practices as per Infant and Young Child Feeding

(IYCF) guidelines by SNCU pediatricians in our hospital. Mothers in Group B were also interviewed with the same questionnaire by the same interviewer after delivery. The data from the questionnaire of the two groups were analyzed and compared using open EPI INFO statistical methods.

Results: Early initiation of breast feeding was observed in 88 % (252-mothers) of Group B compared to 67 % (201-mothers) in Group A. Among the literate women 75% (98-mothers) of Group A and 94% (138-mothers) of Group B women followed early initiation of breast feeding where as in illiterate women early initiation was noticed in 31% (92-mothers) of group A and 41%(114-mothers) of group B mothers. Media played minimal role 16% (48 mothers) of group A and 9% (12 mothers) in group B in encouraging breast feeding. Support from family members & hospital staff had positive influencing on breastfeeding in the groups. 71% (213) of Group A and 89 % (254) of Group B mothers felt breast feeding should be continued for two years and beyond.

Conclusion: It revealed that mothers, in virtually all cultures and communities, have considerable knowledge and experience related to all aspects of maternal and child development, and that they have a strong commitment to promoting the well-being of children, their mothers, and families. 'To have enduring effects, interventions must have an impact on social norms'. In particular, in households in traditional societies around the world, older women or grandmothers play a leading role in decision. They also serve as the primary caregivers of women and children and will continue to play-important role in mother and child health. Thus early initiation of breast feeding, antenatal counseling, educating other family members and support of media etc. will have major role in promoting exclusive breast feeding.

Key words

Breast Feeding, Knowledge, Literacy, Early Initiation, Antenatal Counseling, Education, Influence of Media.

Introduction

The milk of different animals is uniquely species specific and its composition is adapted to serve the nutritional need of their offspring by virtue of unique biological and biochemical composition. Indeed, breast milk is not only species specific, it is baby specific for example, if the baby is born pre-term, breasts produce milk that has a different composition, especially suited for a premature infant.

Breast-feeding is considered the most complete nutritional source for infants because breast milk contains the essential fats, carbohydrates, Proteins, and immunological factors needed for infants to thrive and resist infection. Exclusive breastfeeding for the first six months of life offers several short-term and long-term advantages such as decreased mortality, reduced risk of infections and healthier growth to name a few. Hence, the World Health Organization (WHO) recommends that infants be exclusively

breastfed during the first six months. However, mothers face several constraints and challenges in continuing with this practice. These include lack of information regarding initiation, continuation of exclusive breast feeding, lack of confidence; need to carry out household work, resumption of employment & inadequate support from family members.

In fact percentage of mothers who are exclusively breastfeeding is still not satisfactory, only 58.3% and 46.4% infants are exclusively breastfed till age of four and six months respectively [1]. Lack of optimal breastfeeding and other nutritional practices means significant number of infants will continue to be at risk for development of malnutrition. This in turn will affect the morbidity and mortality of infants and children in general.

There is hardly any published study from India that provides data regarding the perceptions of

mothers regarding breastfeeding. Given this paucity of data and the possibility that they have the capacity to impact breastfeeding practices, we propose to conduct a study to determine the knowledge, attitude & practices of mothers regarding breastfeeding. Our primary aim is to assess the knowledge, attitude & practices of mothers regarding breast feeding as well as to determine the impact of lactation counseling to mothers around the time of delivery on breast feeding practices.

Materials and Methods

The present study was a single center cross sectional questionnaire based study conducted in a Teaching Hospital in Telangana state in India. Duration of study was from October 2016 to September 2018. It was conducted upon 600 (n=600) women i.e. Expectant mothers admitted in antenatal wards and mothers in labour room and postnatal wards of our hospital, who were otherwise healthy and have given informed consent for participating in the study. Those who had not given informed consent for participating in the study and those who had sickness in baby or mother were excluded from the study.

Study Procedure: 600 women admitted in this hospital for delivery were taken into the study. These women were randomly divided in to two groups Group A and Group B.

Group A (n=300), Women interviewed after delivery with a preset questionnaire which included 22 questions pertaining to knowledge, attitude and practices of breastfeeding. Among group A (300) women 47% (142-mothers) were normal vaginal deliveries and 53% (158-mothers) were cesarean deliveries.

For Group B (n=300), women brief counseling was given just before delivery in the antenatal wards or in the labour room. Counseling was done by women who were appointed as support staffs under NRHM. These women were given basic training on ideal breastfeeding practices as per IYCF guidelines by SNCU pediatricians in

our hospital. Mothers in Group B were also interviewed with the same questionnaire by the same interviewer after delivery. From group B 14 members were excluded from the study due to various reasons like sickness in the mother or baby. Among group B (n=286) women 54% (154-mothers) were normal vaginal deliveries and 46 % (132-mothers) were cesarean deliveries.

The data from the questionnaire of the two groups were analyzed and compared using open EPI INFO statistical methods.

Results

Early initiation of breast feeding was observed in 88% (252-mothers) of Group B compared to 67% (201-mothers) in Group A (**Table –1**).

Table – 1: Early Initiation of Breast Feeding In Study Groups.

	Group - A	Group - B
Yes	67%	88%
No	33%	12%

Among the literate women 75% (98-mothers) of Group A and 94% (138-mothers) of Group B women followed early initiation of breast feeding where as in illiterate women early initiation was noticed in 31% (92-mothers)of group A and 41%(114-mothers) of group B mothers which was statistically significant (**Table – 2, Figure – 1**).

Table – 2: Comparison of Practice of Early Initiation of Breastfeeding in Study Groups with Literacy.

Group – A

Early Initiation	Literates	Illiterates
Yes	98	92
No	33	77

Group – B

Early Initiation	Literates	Illiterates
Yes	138	114
No	09	25

Media played minimal role 16% (48 mothers) of group A and 9% (12 mothers) in group B in encouraging breast feeding. Support from family members and hospital staff had positive influencing on breastfeeding in the groups (Table – 3, Figure – 2).

71% (213) of Group A and 89 % (254) of Group B mothers felt breast feeding should be continued for two years and beyond which was statistically significant (Table –4 and Figure – 3).

Table – 3: Influence of Media and Family Support on Knowledge of Breastfeeding in Study Groups.

Breast Feeding	Group-A	Group-B
Hospital & Family Support	252	274
Media	48	12

Table – 4: Perception of Mothers on Duration of Breast Feeding "2 years and Beyond" In Study Groups.

Duration Of Breast Feeding-2 Years & Beyond	Group-A	Group-B
Yes	213	254
No	87	32

Figure – 1: Comparison of Practice of Early Initiation of Breastfeeding in Study Groups with Literacy.

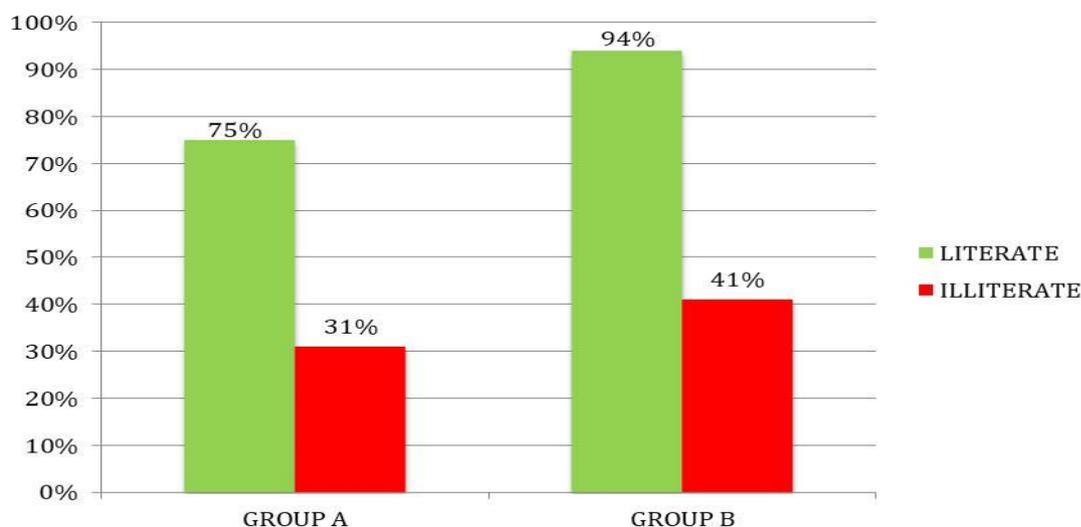


Figure – 2: Influence of Media and Family Support on Knowledge of Breastfeeding in Study Groups.

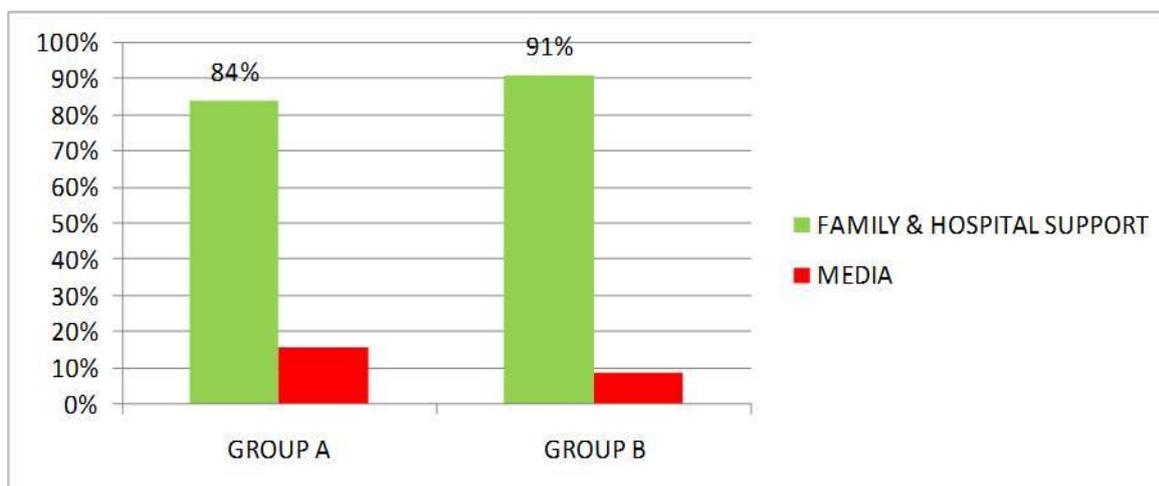
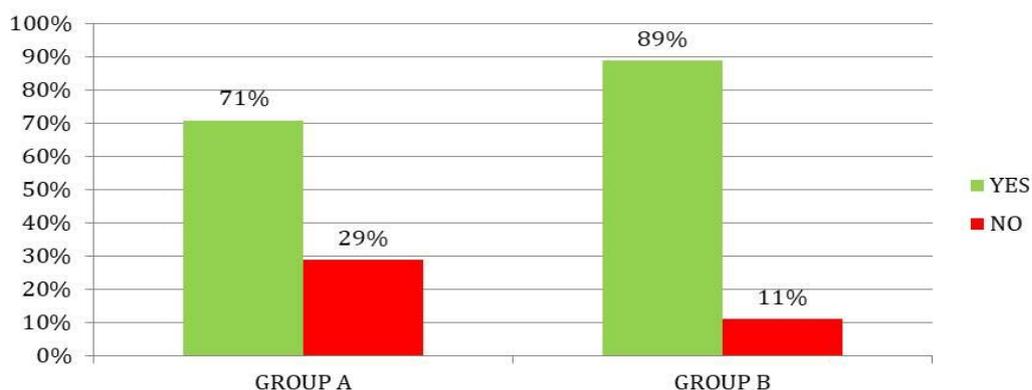


Figure – 3: Perception of Mothers on Duration of Breast Feeding "2 years and Beyond" In Study Groups.



Discussion

Epidemiological research shows that human milk and breastfeeding of infants provides advantages not only in term of general health, growth and development of baby but also health benefits to mother and also to society. There have been considerable researches done to demonstrate factors affecting exclusive breast feeding.

1. One study done in Canada by Ban Al-Saheb, Andrea Lanes, Mark Feldman and Hala Tamim in 2006 assessed a wide range of variables as potential Predictors of exclusive breastfeeding with sample size of 5,615 weighted to represent 66,810 Canadian women [13]. Socio-economic status, maternal characteristics including age, number of previous pregnancies, pre pregnancy maternal body mass index (BMI) and mothers perceived health, pregnancy related factor, support during pregnancy, mothers reaction to pregnancy, mothers stress level before and during pregnancy, health problems during pregnancy, attendance of prenatal classes, number of prenatal care visits and type of prenatal care received and finally, delivery related factor (type of delivery, type of birth setting, birth weight, gestational age and baby's admission to neonatal intensive care unit) and postpartum variables(hospitalization of baby, support after birth, work status after birth and postpartum depression) were examined. With regard to maternal

characteristics, living with a partner, having had previous pregnancies, older age at pregnancy and lower pre-pregnancy BMI was found to be significantly associated with 6 months exclusive breastfeeding. By the same token, young age at first pregnancy, maternal health problems, and infant's admission to intensive care unit and employment before 6 months from birth was negatively associated with exclusive breastfeeding.

2. In 2000 Samir Arora, et al at Pennsylvania surveyed 245 mothers through 28 simple mailed questions [14]. Study showed breastfeeding initiation rate was 44.3% in study population. By the time the infant was 6 months old, only 13% of these were still breastfeeding. The decision to breastfeeding or to bottle-feed was most often made before pregnancy or during the first trimester. The most common reasons mothers chose breastfeeding included benefits the infant's health, naturalness and emotional bonding with the infant. The most common reasons bottle-feeding was chosen included mother's perception of father's attitude, uncertainty regarding the quantity or breast milk, and return to work. By self-report, factors that would have encouraged bottle-feeding mothers to breastfeed included more information in prenatal class: more information from TV, magazines, and books; and family support. The study concluded that

to overcome obstacles, issues surrounding perceive barriers need to be discussed with each parent. To achieve the goal of 75% of breastfeeding mothers, extensive education regarding the benefits must be provided for both parents and optimally the grandmother by physicians, nurses, and the media before pregnancy or within the first trimester.

3. Study in Brazil (2007), Chaves RG, et al. pointed statistically significant negative factors associated with duration of breastfeeding [15]. This longitudinal study was undertaken enrolling 246 women and they were seen monthly for first 12 months after birth or until they stopped breastfeeding. The prevalence of exclusive breastfeeding of six months was 5.3%. Maternal age less than 20 years ($p=0.001$), gestational age < 37 weeks ($p=0.039$), less than five or more than nine prenatal consultations ($p=0.002$), first suckled more than 6 hours after birth ($p=0.032$), newborn with intercurrent condition ($p=0.001$), use of alcohol or tobacco ($p=0.001$) and use of a pacifier negative statistically significant association with duration of breastfeeding. However, factors negatively associated with exclusive breast feeding for six months were birth weight of child $< 2,500$ g ($p=0.03$), incorrect answer to question on breastfeeding technique ($p=0.012$), intention to breastfeed for less than 2 years ($p=0.009$), use of alcohol or tobacco ($p=0.036$) and use of a pacifier($p=0.002$).
4. In 2008 Ruowei Li, et al. [16] analyzed 1323 mothers who participated in the Infant Feeding Practice Study. The study suggested sore nipples, insufficient milk production, and their infant's breastfeeding difficulty, as well as their infant's lack of satisfaction with breast milk were some of the few major factors influencing decision of early cessation exclusive breastfeeding. These results suggest that mothers perception of having a low milk supply might, in many cases, be attributable to their lack of knowledge regarding the normal process of lactation or to technical difficulties in feeding rather than to an actual inability to produce a sufficient quantity of milk. They also suggest that most mothers can overcome temporary breastfeeding problems without resorting to supplementation if they receive appropriate guidance from health professionals, including reassurance that what they perceive to be a low milk supply is actually sufficient and that infant growth is uneven and often occurs in spurts.
5. Ruhusen Kutlu, et al. [17] in 2006 did cross sectional study with 214 mothers who had children aged between 1-72 moths. Study exhibited that in 6 months or over exclusive breastfeeding group, the prevalence of initiation of breastfeeding within half an hour was higher than in the group who was exclusively breastfed for less than 4 months ($p=0.004$). Other factors were mode of delivery that is caesarean section was associated with delayed initiation of breast feeding.
6. Susin et al in 2005 conducted a prospective study on 601 mothers or normal babies [1]. This study demonstrated abandonment of exclusive breastfeeding within the first month was significantly associated with maternal or paternal mothers who advised that water or tea (OR=2.2 and 1.8 respectively) and other kinds of milk (OR=4.5 and 1.9, respectively) should be given. Abandonment of breastfeeding within the first six months was associated with maternal and paternal mothers who advised that other kinds of milk (OR=2.4 and 2.1, respectively) should be given. Non-daily contact with the maternal mother was a protective factor for maintaining breastfeeding until six months have demonstrated the grandmothers could have a negative impact on optimum breastfeeding practices in both on its duration and its exclusivity.

7. Mridula Bandyopadhyay, et al. [18] in 2009 have demonstrated that ritual pollution and cultural practices influences lactation and breastfeeding in west Bengal. These practices are upheld and enforced by mothers-in-law, aunts and other elderly female relatives in the family. The study was conducted in four villages of west Bengal state in India with sample size of 402. Initiation of breastfeeding was delayed (only 16.5% stated within an hour of birth after birth) because of the belief that mother's milks is not ready until two-to-three days postpartum. Generally, colostrum was discarded before putting the infant to the breast in the study villages. Breastfeeding lasted up to five years, and the majority of women in the sample introduced supplementary food before six months. Most infants in the study villages were given a pre-lacteal feed immediately after birth, only a small number of women exclusively breastfed – after giving a pre-lacteal feed-until six months in the study villages. Study was concluded by saying that cultural practices needs to be urgently addressed through programs and breastfeeding interventions that infiltrate to the rural areas and urban slums across the country.

In spite of wide spread awareness of importance of breast feeding the national health statistics show decimal figures on ideal breast feeding practices. As per World Breast Feeding Trends Initiative survey conducted in 2012 [18] the Indian statistics show that early initiation of breastfeeding was noted in 40.5%, exclusive breast feeding was given in 46.8% and median duration of breast feeding was given for about 24.4 months.

The current study was a cross-sectional study. In this study early initiation of breast feeding was observed in 67% of group A mothers (without counseling) compared to 88 % of group B mothers (after antenatal lactation counseling). Thus 21% increase in early initiation of breast

feeding was noted with antenatal lactation counseling.

As per World Breast Feeding Trends Initiative survey [19] conducted in 2012 the Indian statistics show that early initiation of breastfeeding was noted in 40.5%, exclusive breast feeding was given in 46.8% and median duration of breast feeding was given for about 24.4 months. According to NFHS -3 [20] statistics early initiation was noticed in 24.5% mothers and exclusive breast feeding was given in 46.4% babies.

In 2000, Samir Arora, et al. at Pennsylvania surveyed 245 mothers through 28 simple mailed questions [14]. Study showed breastfeeding initiation rate was 44.3% in study population, intention to breastfeed for less than 2 years ($p=0.009$). 75% of Group A and 89 % of Group B mothers felt breast feeding should be continued for two years and beyond.

90% of group B mothers felt that exclusive Breastfeeding should be given for 6 months in comparison to only 55% in group A mothers which was statistically significant. Ruhusen kutlu, et al. [17] in 2006 did cross sectional study with 214 mothers who had children aged between 1-72 months. Study exhibited that in 6 month or over exclusive breastfeeding group, the prevalence of initiation of breastfeeding within half an hour was higher than in the group who was exclusive breastfed for less than four months ($p=0.004$). Other factors were mode of delivery that is caesarean section was associated with delayed initiation of breastfeeding.

Early initiation of breast feeding was studied in relation to literacy status. In group-A 70% were literates, 57% were illiterates. Whereas in group B 88% were literates and 77% were illiterates (p value significant).

Media played limited role in encouraging breastfeeding in both study groups. In 2004 Ingram J and Johnson D, et al. [23] evaluated feasibility of an antenatal intervention. An

intervention for grandmothers, partner and family members to support breastfeeding. The studies done to know fathers knowledge about breastfeeding have proven that fathers are enthusiastic in getting involved and that does improve the practice of breastfeeding. 35% of group A felt breast feeding should be discontinued if the mother had fever or any other illness whereas in group B it is only 9%.

Almost all mothers in both groups felt that diet influences the quantity and quality of breast milk and breastfeeding is the greatest joy of motherhood.

Recommendations

Despite the importance of breastfeeding for the child, mother, family and society, breastfeeding rates are low especially exclusive breastfeeding. To modify this situation, actions for encouraging this practice are needed. These must take into consideration factors that interfere in breastfeeding, since it is known that even though breastfeeding is biologically determined, it is influenced by social, psychological and cultural factors.

- In our study we have employed trained lactation counselors with minimal education qualifications and we have observed statistically significant increase in breastfeeding rates. Hence a large scale requirement of lactation counselors in big country like ours can be easily met.
- Hence, we recommend that in every hospital where deliveries are happening, employment of trained lactation counselors should be made mandatory to improve breastfeeding rates.
- Establishment of baby and mother friendly support groups can be a boon to all mothers, especially for those mothers with inadequate family support.
- Media should play a proactive role in promoting breast feeding.
- More IEC activities targeted to promote institutional deliveries will give more

opportunity for lactation counseling besides various other advantages like reducing MMR, NMR thus marching towards achieving millennium development goals.

There are the opinions and encouragement given by people who are around the mother, including the child's maternal and/or paternal grandmothers. Susin, et al. have demonstrated that grandmothers could have a negative impact on optimum breastfeeding practices [2]. It is important to target mothers at various levels in the process of change, as well as targeting the contextual factors and people influencing the mother to augment exclusive breastfeeding practice.

Conclusion

Breastfeeding has been going on since mammals evolved 230 million years ago on our planet. It was then the obligatory way to feed the young ones. Breast milk is the ideal food for newborn and infants. Successful breastfeeding is an important child rearing skill to be learnt and practiced.

Hence, we concluded that early initiation was observed in significantly higher proportion in group B (after lactation counseling) than in group A (without counseling) irrespective of mode of delivery and literacy status. Mother's perception on exclusive and extended breast feeding was significantly higher in Group B. Support from family members and hospital staff had positive influencing on breastfeeding in both the groups whereas media played limited role in encouraging breastfeeding.

Societies around the worlds acknowledge that mothers play an influential role in the socialization, acculturation, and care of children as they grow and develop and in the education and supervision of their daughters and daughters-in-law. While certain harmful practices are promoted by mothers in various cultures, given the wide-ranging role they play and their

influence and intrinsic commitment to promoting the well-being of women and children, they should be viewed as key actors in development programs, family and community survival strategies.

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