

Retrospective study to improve early initiation of breastfeeding in newborns

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ABSTRACT

Background: Breast milk is the best nutrition to every new born baby. WHO recommends that all new-borns should be breastfed within one hour of birth and then on demand. Exclusive breast feeding i.e. avoiding any other feeds till 6 months of age, is best for the baby. Despite these guidelines, our national average of initiating breastfeeding within the first hour is less than 50% as per NFHS 2015-2016. The objective was to study the existing rate of early initiation of breast feeding in the study hospital.

Methods: Retrospective data collection from 2015 to 2017 was used for this study. Mothers were educated about colostrum and benefits of early initiation of breastfeeding in their third trimester and during their baby shower.

Results: Early initiation of breast feeding was successful among 2624 babies out of 2835 babies who were born in the study period.

Conclusions: As compared to national averages, the study hospital had a superior percentage of babies being initiated early on breastfeeding. We need to educate and motivate the society to encourage exclusive breast feeding for all babies. Professional help in the form of dedicated lactation consultants of guidelines will help mothers to breast feed their babies sooner and for longer. Busting local myths and harmful practices is the need of the hour.

Keywords: Breastfeeding, Early initiation, First hour, Human milk, Newborn, Postnatal

INTRODUCTION

Every year one million infants die and million others are impaired because they are not adequately breastfed. This is despite the available scientific evidence that breastmilk is vastly superior to any other food available to the baby. WHO and UNICEF jointly stated that the initiation of breastfeeding within first hour of birth is vital towards reducing infant and under five mortality. Breastfeeding within an hour of birth ensures the provision of colostrum to the baby which even though is little in quantity is rich in lipids and antibodies which helps the baby to build its immunity and intestinal maturation.¹ Early initiation also

helps in the production of sufficient milk for the baby, improvement of latching and reduces risk from hypothermia.² Mothers who suckle their infants within one hour of birth have a greater chance of successfully establishing and giving exclusive breastfeeding for 6 months. An effective lactating mother is also protected from breast, uterus and ovarian cancers.³

The simple way of helping the mothers to breastfeed is a beautiful work. Understanding the mothers' anatomy and physiology of breastmilk transfer and the benefit for the mother due to breastfeeding is important.⁴ Breastfeeding as a subject is fascinating. Mother nature has provided

women with breasts and the miracle food that comes out of it is breastmilk. During pregnancy around 3000 calories are stored in the mothers' fatty tissues. These are called lactation calories and they are used for milk production. These help the mother to regain her figure.⁵ New born babies are very active and alert during first hour of birth and then they go to sleep. At this time the baby has a strong suckling reflex. Skin to skin contact stimulates milk flow and helps the mother to bond with the baby. Touch of the nipple to the baby's mouth makes the baby to open its mouth wide and take the breast. This also ensures that breast milk is baby's first food.⁶

This study aimed to support mothers in breastfeeding at first hour of birth and to assess the prevalence of early initiation of breastfeeding in a tertiary care hospital.

METHODS

The study was conducted in Fortis Hospital, Bannerghatta Road, Bangalore City. This hospital is a 350 bedded tertiary care centre with 25 beds in Obstetrics Department. The hospital has a well-functioning lactation clinic headed by a senior lactation consultant.

Retrospective study was done after completing our hospital data from 2015-2017. The study subjects were 2788 mothers who delivered normally or via cesarean section. These mothers in their antenatal period were educated about colostrum and the benefits of early initiation of breastfeeding.

Inclusion criteria

- Newborns after normal delivery, vacuum or forceps deliver and C- section deliveries were included in the study.

Exclusion criteria

- Newborns that needed immediate NICU care for prematurity or asphyxia were excluded from study.

The interventions in our study

- Training and increased awareness in labour room staffs, nurses regards introducing the baby to the mother, congratulating the mother reassuring the mother, helping with the appropriate position for mother and latching for the baby
- Increasing awareness in pregnant couple regards advantage of early initiating of breast feeding and exclusive breast feeding for 6 months
- Lectures on anatomy and physiology of lactation, problems of breast feeding, how to council mothers and families, how to help working mothers to breast feed, when and how to start complementary food after 6 months of age were discussed in various sessions

- Monitoring timing of breast feeding, written informed consent to be elicited of mother / family demand artificial feeding, removing artificial feeds from the wards also helped in starting and maintaining healthy breast-feeding practices.

Statistical analysis

The data was entered into Microsoft Excel and descriptive data was analysed into numbers and frequencies.

RESULTS

Among the 2788 study mothers, 9% of them belonged to 18 to 25 years age group, 78% of them belonged to 26 to 35 years and 8% of them belonged to 36 to 45 years. Most of the mothers were primipara (65%), para 2 (34%) and para 3 (1%). Most mothers belonged to middle socio-economic status (45%), 30% belonged to upper middle, 2% upper and 2% lower socio-economic status.

The number of babies in this study was 2835 (including twins and triplets). Due to our interventions, we could successfully initiate breastfeeding among 2624 mothers within an hour of birth. Only 211 mothers could not initiate breastfeeding within an hour.

Between January to December 2015, we observed that the breast-feeding initiation within 1st hour of birth was at 80.56%. From the period January 2016 to December 2017, our success grew up to 96.7%.

DISCUSSION

Breast milk has no substitute. It is the best nutrition for the newborn.

The 10 steps for successful breastfeeding are

- Have a written breast-feeding policy that is routinely communicated to all health care staff
- Train all healthcare staffs in the skills necessary to implement this policy
- Inform all pregnant women about the benefits and management of breast feeding
- Help mothers initiate breast feeding within 1 hour of birth
- Show mothers how to breast feed and how to maintain lactation, even if they are separated from their infants
- Give infants no food or drink other than breast milk unless medically indicated
- Practice rooming-in to allow mothers and infants to remind together 24 hours a day
- Encourage breast feeding on demand
- Give no pacifiers or artificial nipples to breast feeding infants

- Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital.⁷

In our hospital, the breastfeeding policy is communicated to all staff and 10 steps of baby friendly hospital initiative is written in out-patient department, ward and labour room. All staffs are trained periodically on current information on breastfeeding. The importance of breastfeeding, the benefits to baby, mother, family and society are communicated. The first breastfeeding is initiated to the mother in labour room and operation theatre by delivery staff. If the baby is separated from the mother for medical reasons, expression of breast milk is done and sent to baby. In preterm, low birth weight babies colostrum will be harvested before delivery and then applied to baby's mouth once the baby is born. No pre-lacteal feeds such as glucose water, water or honey is given to newborns. Mother and baby are kept in the same room, same cot and the same is communicated to family members. All mothers are encouraged to do demand feeding. Mothers are instructed not to use artificial nipples or pacifiers. Before discharge from hospital, breastfeeding support groups are created.

Common barriers to early initiation of breastfeeding are poor knowledge about breastfeeding technique, advantages of colostrum, breastfeeding problems such as nipples issues, baby requiring neonatal care and cultural practices.⁸ In our study, the presence of lactation clinic in the study hospital, health education regarding benefits of early initiation has assisted the women in easy early initiation.

Average global prevalence of early initiation of breastfeeding is 64%.⁹ However, we successfully initiated breastfeeding early in more than 90% of the study population. This is due to the motivation, health education and involvement of all the stakeholders of the study hospital.

The WHO has adopted the international code of marketing of breast-milk substitutes in 1981 and recommends restrictions on marketing breast milk substitutes, infant feeding bottles and teats. The code requires:

- No advertising of breast milk substitute to families
- No free samples or supplies in the healthcare system
- No promotion of products healthcare facilities, including no free or low-cost formula
- No contact between marketing personals and mothers
- No gifts or personal samples to healthcare workers
- No words or pictures idealizing artificial feeding, including pictures of infants, on the labels or products.
- Information to health workers should be scientific and factual

- All information on artificial feeding should explain benefits of breast feeding and hazards of artificial feeding
- Unsuitable products should not be promoted for babies
- All products should be high quality and take account of the climate and storage condition of the country.¹⁰

To add- "Annual cost of not breast feeding"

- WABA statement
- Easy to replicate model
- Easy to maintain model
- National intervention required
- ADD pictures of our boards.

In our hospital, breastmilk substitutes/formula advertisements are not allowed. Health care staff do not receive any complimentary samples of formula. Health care staff make sure that mothers and their families do not develop any contact formula marketing personnel. The hospital has no pictures of babies with formula.

Health care professionals are often confused by the harms/benefits of infant milk substitutes. They should report any violations of the Infant milk substitute code and support breastfeeding.¹¹

In this study, it has been observed that by effective involvement of concerned stakeholders' early initiation of breastfeeding can be achieved and milk substitute introduction can be prevented.

CONCLUSION

There is a major lacuna in the knowledge regarding breast milk production among antenatal mothers in third trimester. Breastfeeding knowledge imparted to these mothers during antenatal counselling and baby showers can give confidence to these mothers to start breastfeeding immediately after birth.

In our study, among 2788 mother, with 2835 babies (including twins and triplets), 2624 babies (92.5%) were breastfed within the first hour of birth. Early initiation of breastfeeding is feasible in tertiary care hospital settings with adequate health education.

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