



Breastfeeding; the Impact of Knowledge and Practices

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Abstract

Objectives: The current study aims to assess knowledge, attitude and practices of initiation of breastfeeding within 1 hour of delivery and continuation of Exclusive Breastfeeding among women delivered at tertiary care center in India and to find out the factors, which influence the breastfeeding behaviors.

Introduction: Scientific research during the last few decades has clearly proved that breastfeeding provides both short- term and long-term health benefits to infants, mothers, families, and society. It is also known that breastfeeding is an exceptionally cost-effective strategy for improving child survival and reducing the burden of childhood disease. However there is still a large gap between the knowledge and practice of breastfeeding.

Design/Method: It is a cross-sectional, questionnaire-based study done among women attending outpatient and inpatient Department of Obstetrics of Apollo Cradle for Women and Children, Marathahalli, Bangalore, India from January 2023 to August 2023. With the proper data, A pre-designed, self-administered, standardized questionnaire regarding knowledge, attitude, and practices of breastfeeding was conducted.

Findings: Among 842 women enrolled in the study, all of them were married, 47% were primiparous, and 53% were multiparous. Regarding initiation of breastfeeding within 1 hour, 82% of mothers initiated breastfeeding within 1 hour, 33% of the women failed to Exclusive breastfeed. Regarding knowledge and attitude about breastfeeding, majority of the females 90% considered breast milk as best food for a newborn. In our Study only 25% of the women received ante-natal counselling and training by Lactation Expert.

Conclusion(s): Although breastfeeding is practiced by many mothers in a developing country like India, there is a significant gap in knowledge and optimal breastfeeding behaviors. Healthy breastfeeding behavior can be encouraged among mothers by proper counseling by health care workers and organizing educational programs focusing women on golden hour of feeding, skin to skin contact and benefits of exclusive breastfeeding especially before delivery.

Keywords: Exclusive Breastfeeding, delivery, knowledge, attitude, primiparous

Introduction

The majority of mothers in poor nations breastfeed their babies regularly, despite widespread misconceptions about the ideal nursing practices. Breast milk is a baby's first natural food and

contains all the nutrients which is required during first few months of life. Breastfeeding reduces infant mortality and morbidity from sudden infant death syndrome, necrotizing enterocolitis, otitis

media, respiratory infections, and other conditions [1]. The benefits associated for mothers who exclusively breast feed their babies are reduction in breast and ovarian cancers, aids in postpartum weight loss and reduces risk of hypertension.

Recent scientific studies have conclusively shown that breastfeeding helps newborns, mothers, families, and society in terms of both short- and long-term health. Additionally, it is well recognized that nursing improves child survival and lowers the burden of pediatric disease at an incredibly low cost. However, there is still a large gap between breastfeeding knowledge and practice. Additionally, less is known about the long-term health advantages of breastfeeding for women and newborns, particularly in relation to cancer, blood pressure, cholesterol, and obesity among mothers.

According to a recent meta-analysis, nursing for both short and lengthy periods of time can prevent childhood acute lymphoblastic leukemia and acute myeloblastic leukemia.

Despite this understanding and the widespread perception that Indian mothers have a natural affinity for breastfeeding, the country does not have high rates of exclusive breastfeeding. [2]

The best nursing methods are exclusive breastfeeding for the first six months of life, starting breastfeeding as soon as possible after birth-within an hour, exclusively breast feeding up to 6 months and continuing for at least two years. [3]

The World Health Organization (WHO) also suggests starting colostrum administration at birth and starting age-appropriate supplemental feeding after six months of age. Undernutrition is to blame for about half of all fatalities in children under five. [4].

This is demonstrated by the National Family Health Survey-5 of India, which found that only 64% of infants were exclusively breastfed for the first six months of life and only 41.4% of infants began nursing within an hour of delivery. [5]

India has the highest rate of infant mortality in the world and is responsible for 20% of the 5.9 million infant fatalities worldwide [6].

According to UNICEF India Statistics 2022, the country's infant and under-five mortality rates are 19 and 31 per 1000 live births, respectively, and nearly 50% of these deaths are caused by malnutrition [7]. According to UNICEF India statistics from 2022, 52% of infants breastfeed, exclusively until they are six months old, and 78% of infants begin breastfeeding within an hour.

NNF recommendations state that hospital procedures related to delivery like higher number of C-section, medical interventions during the labour have a significant impact on the success of breastfeeding. Breastfeeding start is significantly influenced by the education of nurses, doctors, and other health care providers working with the nursing couplet, understanding the dynamics of breastfeeding.

Following birth, guidelines advise skin to skin contact immediately after birth and initiate breast feeding within an hour of time. Early breast feeding initiation is crucial for establishing a good lactation cycle and for feeding the baby "colostrum". [7, 8]

Breastfeeding should happen every 2 to 3 hours once as the baby demands around 10 to 12 times per day. When there are worries about perception and insufficient breast milk, a thorough history and physical examination of the mother and infant should be done. Additionally, a nursing session should be observed with LATCH score. The number of wet diapers per day and weight monitoring can be used to understand about satisfactory breast feeding [9,10,11]

The composition of human breast milk has the potential to both encourage "normal" bacterial colonization of the gastrointestinal system and reduce the invasiveness of some pathogenic microorganisms. These characteristics of breast milk may be crucial for the newborn infant's ability to fight infections. [12,13]

To foster the proper promotion and health support for breastfeeding mothers and to contribute to the overall increase in the breastfeeding rate, this study evaluated women's knowledge, attitudes, and practices about breastfeeding as well as the factors that influence breastfeeding.

Methods

Study Setting:

842 Women delivered in the Department of Obstetrics, Apollo Cradle for Women and Children, Marathahalli, Bangalore, India for the period from January 2023 to August 2023.

Method of Data Collection

All Women delivered in the department of Obstetrics from January 2023 to August 2023, Apollo Cradle for Women and Children, Marathahalli, Bangalore were included in the study. After obtaining the informed consent, using a pre- designed, self-administered,

standardized questionnaire regarding knowledge, attitude, and practices of breastfeeding was conducted.

The questionnaire, included data about maternal age, parity, type of delivery, place of delivery, education, employment, socio-economic status, residence initiation, and duration of exclusive breastfeeding and weaning practices.

Inclusion Criteria

All Women delivered in the Department of Obstetrics, Apollo Cradle for Women and Children, Marathahalli, Bangalore

Exclusion Criteria

Conditions where breastfeeding is contraindicated like galactosemia, mother suffering from Herpes simplex virus, HIV, active tuberculosis, and psychoses.

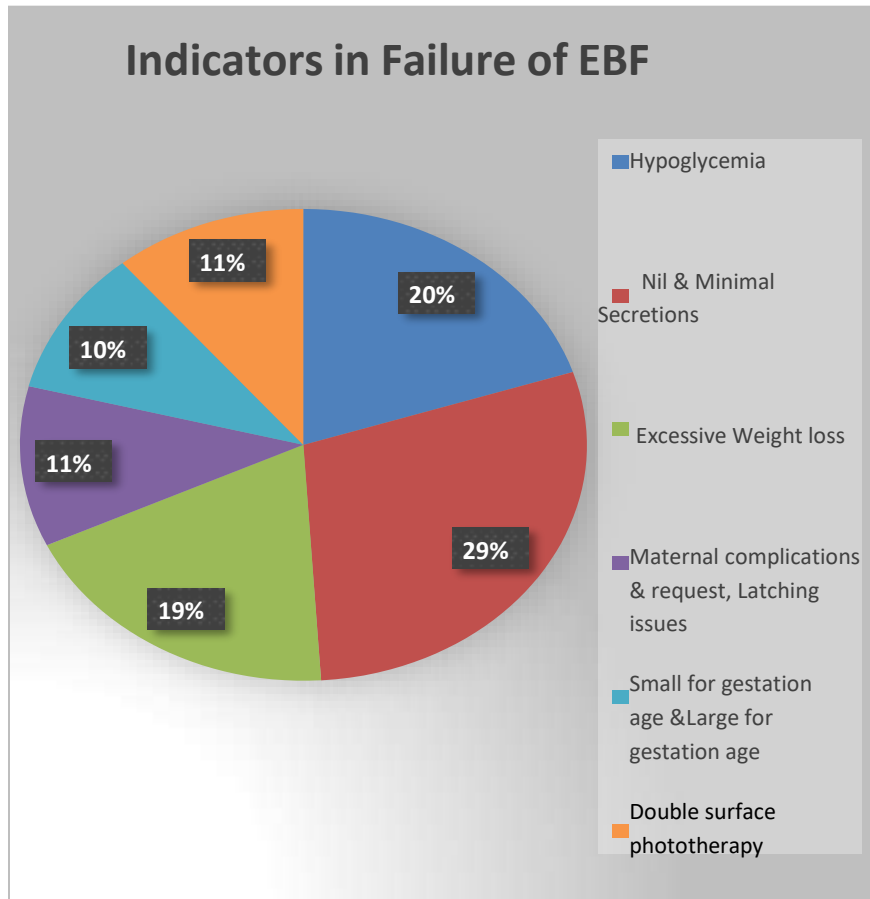
Results –

Table 1 Practices regarding breastfeeding (n = 842)

Practices	Respondents (%)
Initiation of Breastfeeding	
<1 hour	690 (82%)
Up to 24 Hours	101 (12%)
After 24 Hours	51 (6%)
Formula feeds	
Given	278 (33%)
Not given	564 (67%)

From Table 1, It shows that 82% of the women initiated breastfeeding within one hour of delivery. 12% of the women initiated breastfeeding within 24 Hours of delivery and 6% of the women started breastfeeding after 24 hours of delivery. The major reason for the failure of initiation of breastfeeding was, the baby required NICU admission and observation.

Chart 1: Indicators of failure in EBF n – 842



Out of 842 women, 255 women 33% failed in providing exclusive breastfeeding because of following factors mentioned below in Chart 1

From Chart 1, Majority of the women (74) 29% failed EBF because of Minimal or Nil Secretions, (52) 20% of babies had Hypoglycemia, (49) 19% of babies had weight loss, (27) 11% of women had Maternal complication and latching issues, (24) 10% of babies had small for gestational age (SGA) & high for gestational age (LGA) & (29) 11% of babies underwent Double surface phototherapy (DSPT).

Table 2 Women knowledge and attitude towards breastfeeding (Multiple responses).

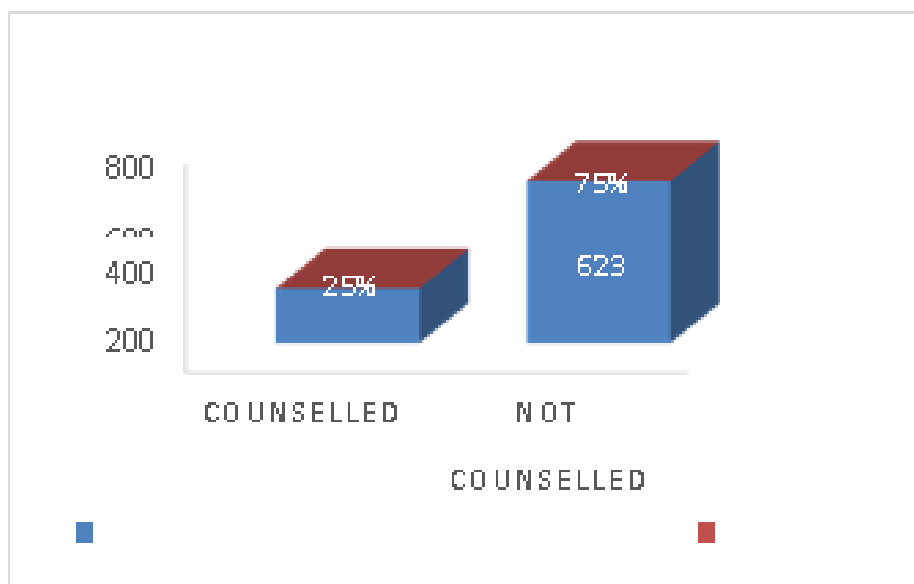
Knowledge	Respondents (%)	Attitude	Respondents (%)
Child remains healthy	716 (85%)	Breast feeding leads to loss of figure	505 (60%)
More nutritious	716 (85%)	Breast feeding is old fashioned	472 (56%)
Gives natural immunity	615 (73%)	Is pure & costs nothing	741 (88%)
Helps in preventing conception	236 (28%)	Fosters close bond	598 (71%)
Mothers milk is the best milk	758 (90%)	In public, it is embarrassing	252 (30%)
Improves growth &	589 (70%)	Prevents going to work	370 (44%)

Breastfeeding Technique

Regarding breastfeeding technique, most of the mothers fed the babies with in 1 hour of time and continued to feed on demands for every 2 to 3 Hours followed by 10 to 15min of burping. Mothers are sitting comfortably in lean back position with baby in cradle or cross cradle positions with breast holding. Maximum of mothers knows about latching techniques where nipple and areola should be inside the babies mouth and completely emptying one breast followed by other. Mothers are observing babies hunger cues, satisfactory signs and wet diapers. In our study only 25% of women attended antenatal education sessions by lactation expert.

Chart 2: Women undergoing ante-natal counselling with Lactation Experts

Out of 842 women 25% (n=210) of them underwent ante-natal counselling with Lactation Experts as seen in chart 2



Discussion

Findings reveal that majority of the women 82% initiated breastfeeding within 1 hour of Delivery. 67 % of the mothers practiced Exclusive Breastfeeding. Majority of mothers have good knowledge about breastfeeding and believe breast milk as the best milk (90 %), more nutritious (85 %), and cost efficient (88 %). In addition, 80% women thought that breast milk promotes bonding between mother and child. Only 28 % of mothers had knowledge about its function as lactational amenorrhea, i.e. role of breastfeeding in contraception, which is quite dismal for a developing country like India where contraception plays a big impact on population control.

Causes for not exclusively breastfeeding in the present study were multifactorial. These include admission or observation of babies admitted to special care unit for tachypnea/ oxygen therapy

which correlate with the findings of the authors across the country [14,15,16]

Supplementary feed was seen more in babies who were either Small for gestational age or Large for gestational age. Formula feeds were also given to babies who had Asymptomatic Hypoglycemia. Formula feed incidence was more in babies admitted for Phototherapy with excessive weight loss. Babies who had more than 8% weight loss on day 2 of life along with minimal or less milk secretions in mother received formula feeds.

Maternal request and mother in High dependency unit due to obstetric complications were the other notable reasons for not adhering to exclusive breastfeeding practices as also reported by other authors. [17,18]

In a study by Premlata et al. (2014), in Rajasthan, it showed only 35% mothers knew about proper

position and 78.2% mothers practiced burping. These findings from the present study clearly highlight the fact that adequate breastfeeding counseling is lacking during antenatal, intra-partum, and postpartum period.

Counseling should focus mainly on educating women on skin to skin contact, practicing rooming-In, feeding on demand, assistance by the nursing staff about positions and Latching technique, their practices of breastfeeding along with ante-natal and post-natal care as emphasized by many authors [19, 20].

In our center there is a trained lactation expert who trains and sensitizes the ante-natal women on the importance of breastfeeding, challenges during breast feeding and regular follow up after discharge. The trend of initiating Exclusive breast feeding is increasing in those women who have received antenatal counselling.

Conclusion

In a developing nation like India, the majority of mothers nurse their infants, and nursing up to six months. However, mothers generally lack adequate knowledge and best practices for breastfeeding. By getting appropriate counseling from healthcare professionals like Doctors, Nurses and Lactation Experts and setting up educational programs with a focus on antenatal classes for pregnant women. The evidence demonstrates that breastfeeding has numerous advantages for children of all ages and Nursing Mothers [7, 9].

Innumerable short- and long-term adverse health effects that place a heavy burden on people, the healthcare system, and society have consistently been shown to be prevented by breastfeeding. Even while some of the beneficial impacts of breastfeeding on certain health outcomes may be minor, these variations are crucial at the population level.

The overall advantages of breastfeeding are expected to be significant when combined with the multiple health outcomes where the effect is notable. To improve our knowledge of breastfeeding's health advantages and the processes by which it gives protection, more high-quality research on a variety of

health outcomes is needed. In the same way, offering financial assistance and educating people about the financial advantages of breastfeeding through institutional or governmental initiatives may also help with the problem. [15, 21].

Implementing focused initiatives with the goal of raising breastfeeding rates would improve maternal and neonatal outcomes. Employing lactation expert in Maternity Hospitals, Lactation nurses around the clock to assist delivered women and being available on telephonic calls after discharge will improve the breast feeding rates.

The advantages of this study are to find out the actual rates of exclusive breast feeding at a high risk delivery centre in a metropolitan city and emphasize the importance of golden hour of feeding.

Limitations of this study were a smaller number of pregnant women undergoing antenatal counselling by lactation expert and increased number of High risk pregnancies/ deliveries contributing to decrease in exclusive breastfeeding during hospital stay

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Abbreviations

World Health Organization (WHO), National Neonatal Form (NNF), Indian Academy of Pediatrics (IAP), Exclusive Breast Feeding (EBF)

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