

## **Breastfeeding - Practices, problems and prospects**

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### **Introduction**

Medical and public health experts advocate breastfeeding as the best method of feeding young infants for a wide variety of reasons. It is evident that even the most sophisticated and carefully adapted formulae can never replicate human milk, as human milk has anti-infective properties, and is a 'live' fluid which cannot be mimicked in an artificial formula.

An adequate supply of human breast milk is known to satisfy virtually all the nutritional needs of an infant at least for the first six months of life. It is easily digestible and facilitates skin to skin contact and physical warmth between mother and child, which further strengthens the emotional bond between them. Breast milk, and especially colostrum, in the long term, prevents atherosclerosis, hypertension, and obesity; it also prevents allergy to non-specific proteins and develops immunity.

Breastfeeding has a vital child-spacing effect which is especially important in developing countries where the awareness, acceptability and availability of modern family planning methods are very low. In a country like India where a large majority of the population has a low income and poor education, the need for breastfeeding becomes even more marked, and, in fact, it represents the only way of giving a child a fair chance of survival and good health.

Breastfeeding has been a universal practice in the past. But this situation is fast changing in this age of modernisation. Studies reveal that contemporary women are less able to lactate and breastfeed than their predecessors. They also observe that the practice of breastfeeding is on the decline, both in terms of incidence and duration.

Many studies on breastfeeding have been conducted worldwide during the last sixty years. The World Health Organization (WHO) [1] conducted a collaborative study on breastfeeding in nine developing countries including India between 1975 and 1978, and found socio-cultural factors such as education, employment, income, and urban residence to be the strongest determinants of the length of breastfeeding.

Various studies [1-3] including the WHO study, have reported that mothers consider breast milk the best food for infants. However, though such a high percentage of mothers think so, the actual practice is in sharp contrast to this belief.

According to the WHO report, [1] the incidence of breastfeeding by mothers who ever breastfed their infants, was 96 percent in the urban areas of India whereas it was 100 percent in rural India (the urban rate has been reported to be as low as 45 percent in Middle Atlantic U.S. [4] There was thus no significant rural-urban difference in the incidence of breastfeeding in India. However, there was a sharp contrast in the duration of breastfeeding - 97 percent of rural mothers breastfed their 15 month-old babies as against only 54 percent of urban mothers who breastfed their babies of the same age.

A 1969 study in Delhi, [5] indicated that 94.5 percent and 41 percent of mothers breastfed their one month-old and one year-old infants respectively while a decade later, a report from Hyderabad found that the corresponding rates were only 87 percent and 33 percent respectively, [1] suggesting thereby that breastfeeding behaviour is apparently on the decline in recent years.

Looking into the reasons for the incidence and patterns of breastfeeding, certain studies found a high correlation between the duration of breastfeeding and the mother's socio-economic status, that is, economically deprived mothers tended to breastfeed their babies for a longer period as compared to economically well-off mothers. [1], [3], [5-7]

Another significant determinant of breastfeeding seems to be the education of the mother. It has been shown that educated mothers tend to discontinue breastfeeding earlier than their illiterate counterparts. [1], [3], [5], [6], [8] Again, working mothers have been observed to find it difficult to breastfeed their infants and wean them quite early, while those working in the organised sector tend to breastfeed them longer and frequently. [1], [2], [5], [9]

Just as these studies have clearly demonstrated that the duration of breastfeeding is negatively or inversely related to socio-economic development, it has also been found to be inversely related to modernisation. Modernisation is associated with major socio-structural changes including increased participation of women in the non-agricultural labour force, changes in family structure, changes in attitudes and value, and increasing reliance on social institutions other than the family for social learning.

The links between breastfeeding behaviour and lactation performance have been established by both human and animal studies. It has been noted that women

tend to maintain a specific pattern of the number and duration of feeds perday; what has been termed as the "breastfeeding style". [10]

Studies reveal that frequent nursing increases the volume of breast milk, while less frequent nursing diminishes it. [11], [12] Also, the pattern of frequent nursing during the early postpartum period is associated with more sustained lactation during the subsequent months. [13]

The present paper focuses on the breastfeeding behaviour of individual mothers, taking many case studies to highlight the different problems faced by mothers and the practices adopted by them. It is based on the interviews conducted on a hundred mothers from three different economic classes in the twin cities of Hyderabad. Case study methods were used to obtain an indepth understanding of the intricacies involved in breastfeeding behaviour, individual variations and reasons behind a particular kind of breastfeeding behaviour. The problems faced by individual mothers were analysed, and some were found to be genuine while others were guided by misconceptions.

## **Results and Discussion**

The following paragraphs bring out the various aspects of breastfeeding behaviour as elicited from the indepth interviews of the respondents.

### *Initiation of breastfeeding*

The average age of the women was 24.5 years. The average time of initiating breastfeeding or rooming in was found to be 44.64 hours which suggests that breastfeeding was initiated very late, only on the second day.

Various reasons were given for this delay, among which were that the mother had had a Caesarian section delivery; that she did not start lactating; that she was kept hungry so could not lactate; that colostrum should not be given; or the mother's or child's illness or premature birth. In 28 cases, women who had Caesarian deliveries could not breastfeed their babies for two to three days due to the after-effects (semi-consciousness) of anesthesia. However, in certain cases, as in Padmaja's described below, the delay in initiating breastfeeding caused by the operation could lead to failure of lactation.

Padmaja, a graduate from a middle class family began to breastfeed her index child on the third day of delivery as she felt dizzy from the effect of the Calmpose administered to her during her Caesarian delivery. She was in the hospital for 15 days. During the first three days, the child was given distilled water and buffalo milk, and from the fourth day onwards Padmaja began to

breastfeed her infant for 10-15 minutes at each sitting, every four hours. However, she was not able to follow this schedule even for a month, as she developed an abdominal infection due to the Caesarian, and was advised not to breastfeed her baby while she was on antibiotics to cure the infection. This ultimately led to the drying up of breast milk, and she had to wean her baby at the age of one month and switch over to buffalo milk

This an extreme case. Not everybody develops an infection after a Caesarian delivery, though delayed initiation of breastfeeding appears to be quite common in all Caesarian cases. If the mother is determined to breastfeed, she can start as early as possible and breastfeed quite frequently to ensure good lactation. She should not resort to scheduled breastfeeding, and that too, during the early postpartum period. Mothers or nurses should not give tinned or buffalo milk during the first few days of the infant's life as is done frequently by many. This makes the infant less likely to breastfeed leading, in turn, to insufficient milk or lactational failure as in the case given below.

Devasena, a housewife, breastfed her child just for two months and, that too, along with tinned milk following a Caesarian delivery. The milk was given by the nurses from the first day as Devasena was not able to breastfeed for the first few days. She then complained of insufficient breast milk.

It is not true that Caesarian deliveries alone lead to lactational failure. But the practices and behaviour after the operation add to or aggravate the situation. It was found that mothers who initiated breastfeeding quite late and introduced 'top' milk during the first few days postpartum, could not breastfeed for long. They complained that the baby was disinterested. This is because the top feed which is high-caloried may satiate the baby's appetite and prevent it from wanting to feed at the breast. Another important observation was that once the baby was fed with a bottle and a teat, which is a relatively easy exercise for the baby, it is less likely to return to the mother's breast because it finds it more easy to get milk from the bottle than from the mother's breast.

It was generally observed that women who had had a normal delivery, initiated breastfeeding soon after the delivery. Further, mothers who breastfed their infants on demand and for longer periods at each sitting, could breastfeed successfully.

Certain social customs prevalent among the lower income groups were also found to be responsible for the delay in initiating breastfeeding. For example, in the belief that taking food soon after delivery leads to infection the mother was deprived of food for three days after the delivery. Further, the baby was not even put to the breast as they believed that since the mother was fasting, she would

not lactate. This unscientific practice led to weakness and susceptibility to infection, because most of the infants in this community were wet-nursed for the first three days after birth. Since these lower income group women bore children in quick succession and breastfed them for prolonged periods of time, it was not difficult for them to find a wet nurse in the neighbourhood for their infants. However, the infants in all these cases were deprived of colostrum. Some mothers may not start lactating immediately after the delivery, but by putting the baby to the breast soon after birth, helps establish the suckling reflex.

### *Feeding colostrum*

Almost a third of the infants in this study were not given colostrum. This was more so in the case of poor families where home deliveries are common. As the elders in such families are largely illiterate, they consider colostrum as something indigestible and not good. Moreover, the mothers are also unaware of the benefits of colostrum. In this community, it is customary to express it out (squeeze out manually) and throw it at a wall or a tree; it is believed that if it is thrown on the ground people may step on it, and this would lead to drying up of the mother's milk.

In the middle and higher income groups on the other hand, most of the mothers fed colostrum to their infants on the advice of the doctors and health workers in the hospital. Some of the educated mothers had learned about its value by reading books and magazines. Around 40 percent (24) of the mothers from the middle and upper income group were aware that colostrum provide immunity against infections, whereas an equal proportion just believed that it is good for the child but could not specify the reason.

### *Scheduled V/s demand breastfeeding*

In the present study 17 percent of the mothers in the lower income group, twice as many (35 percent) of those in the middle income group, and three times as many (53 percent) of those in the higher income group breastfed their infants according to a fixed time schedule. Mothers who followed such a schedule, were observed to have breastfed for a shorter duration - an average of six months only, whereas 49 percent of those with normal deliveries, who demand-fed their infants, breastfed for an average of 14 months. This shows that demand feeding helps stimulate milk production and thus leads to prolonged breastfeeding.

Padma, a young mother from a middle income family, initiated breastfeeding 24 hours after her index baby was born. She did not lactate much and did not suckle her baby much; she breastfed the baby for five minutes per feed thrice during the day and twice at night following a four-hourly schedule. After a month, she

breastfed the infant only twice at night and gave it top feeds at other times. She reported that she had insufficient milk, and so could not breastfeed more often, and opined that "supplementary foods can replace breast milk during the initial months itself."

The following case study of a mother from the lower income group clearly demonstrates the importance of breastfeeding on demand for successful breastfeeding over a longer period. Yadamma, a mother of three children, had all duce normal deliveries. Her index child was one year old at the time of the interview, and was still being breastfed. The child was nursed just two hours after birth. Yadamma breastfeed the child more than twelve times during the day and quite a few times during the night. She breastfed the baby whenever it cried. Thus, the baby was solely breastfed on demand for six months. Even after the baby was put on supplementation she continued to breastfeed it as many as 10 to 15 times a day. She wishes to continue breastfeeding the baby along with supplementary foods for another three years.

### *Time and frequency*

Most of the mothers especially from the middle and upper income groups were observed to breastfeed their babies for just 5-10 minutes each time. Rarely was a mother seen to breastfeed her baby for more than 15 minutes at a time. Further, most of the women especially in these two income groups breastfed their babies more than ten times a day during the first three months. This is an encouraging feature. However, after three months, with the introduction of supplementary foods the frequency of breastfeeding suddenly dropped to two or three times a day. This was not so among the low income group where the mother continued to breastfeed her baby much more frequently until it was completely weaned. Such prolonged breastfeeding is probably due to their economic condition and inability to afford supplementary foods. This in turn, helps prolong lactation/breastfeeding for several more months as in the case of Yadamma; mothers from the middle and upper income groups, on the other hand frequently complained of lack of milk The volume of milk remains the same for a long time, provided the child is put to the breast as often as before.

### *Some problems*

One of the most common reasons voiced by women throughout the world for the early termination of lactation and the early introduction of milk supplements and weaning foods is insufficient breast milk, called the insufficient milk syndrome"(IMS) by Gussler and Briesemeister [14] which threatens the well-being of infants.

The insufficient milk syndrome has been related to changing patterns of maternal roles and infant care, and the complexities of modern life. Gussler and Briesemeister [14] ascribe it to what they call "non-biologic breastfeeding" and focus on the lack of "constant contact" between the mother and the infant in modern urban settings. They theorise that physical distance, barriers such as clothing, strollers and cribs, minimise intimate contact between the nursing dyads, and the pattern of scheduled, widely spaced feeding, propels the mother and infant down the pathway to insufficient milk. Greiner et al [15] recognise the complex sociocultural and psychological aspects of the insufficient milk syndrome but state that the decreased suckling stimulus to the nipples as a result of supplemental feeds is the most "parsimonious" explanation for insufficient milk.

It would appear then that the insufficient milk syndrome is associated with psychological factors, inappropriate hospital practices, and infant characteristics than with a biological inability to produce an adequate milk supply. [16] In the present study too many mothers complained of insufficient milk.

Another problem related to breastfeeding is flat nipples. Mothers with flat nipples who had to use a nipple shield found it difficult to breastfeed, but could do so successfully as in the case of Jyotsana. Twenty five year old Jyotsana (not her real name), a dentist by profession, had a normal delivery in a private hospital. She was not able to give colostrum to her child as she began breastfeeding three days after the delivery, the delay being due to her flat nipples. The doctors advised her to use a nipple shield using which she was able to breastfeed her infant for ten minutes, about ten to fifteen times a day. She continued this practice and solely breastfed her baby for four months with the help of the nipple shield. Jyotsna suffered from sore nipples that cracked and bled. She did not apply anything as she had read that breastfeeding would automatically heal the cracked nipple. When using the nipple shield, she used to feed only on one side lest the baby gets disturbed in the process of changing the nipple shield from one side to the other. Also, as she found it convenient to feed only in the sitting posture, she used to get up at night to sit and breastfeed the baby. From the fourth month onwards Jyotsna started bottle feeding along with breast milk. The infant who was eight months old at the time of interview was being breastfed, and Jyotsna wishes to discontinue when the baby turns a year-old.

Jyotsna's example demonstrates that despite all the odds, she could breastfeed successfully due to her determination, her positive attitude towards breastfeeding, and knowledge about it.

Another important point to be noted is that the mother should not leave the child sleeping for long hours during the day and even at night. The mothers in our study reported that they breastfed their babies only when they awoke even though they over-slept. Instead, they could wake up their babies frequently and feed them whenever they feel their breasts to be full and engorged. This would help both the mother and the infant - the mother would be able to maintain lactation and the infant would get adequate milk.

The common problems faced by the mothers in the initial months were breast engorgement, sore nipples, leaking and sometimes cracked nipples. These are temporary problems experienced by almost all mothers and can be overcome with time and with a little care.

Some mothers have an ideal period of breastfeeding in their minds but when it comes to practice they rarely keep it up. In fact, in our study, in actual practice, the mothers breastfeed their infants for just half the expressed ideal duration. In many cases, the mother was found to lack determination. Some mothers even expressed their reluctance and uneasiness to breastfeed.

For example, Kalyani felt that breastfeeding her baby for five months would be sufficient. And, though she firmly believed that breastfeeding affects a woman's posture and makes her lose her charm and figure, she was breastfeeding her baby due to pressure from her in-laws and husband. She stated that she felt weak and feverish due to breastfeeding, and was "fed up" with it, and strongly felt that other milk can replace the mother's milk during the initial three months.

Many women believe that the practice of breastfeeding or the presence or absence of breast milk to be hereditary. Once a mother feels that she is not able to lactate well, though temporarily, she may take it for granted that she is not able to lactate well and is no longer able to breastfeed. She switches to alternatives and convinces herself that it was expected and natural, as her own sisters, mother or relatives experienced the same, i.e. could not breastfeed. Thus, the breastfeeding pattern of their sisters and relatives greatly influence their own behaviour.

Madhavi had a normal delivery, but the child was born light-for-date. It was 2.5 pounds at birth. Due to the low birth weight, the baby was unable to suckle properly, and was not even breastfed for one week. Madhavi's family history showed that her two sisters lacked milk and so did her mother who had bottle fed her children. This led Madhavi to believe that her inability to breastfeed was hereditary.



In Madhavi's case, failure to breastfeed can be attributed to lack of proper knowledge on how to breastfeed a premature baby. However, in such cases the mother can express breast milk manually and spoon feed or tube feed the baby as the baby lacks the energy to suckle initially. This will help preserve the mother's milk till the infant is able to suckle properly.

A ritual called "annaprasanna" used to be performed when the infant was six months of age to introduce supplementary foods. These days, it is seldom performed and, if performed, is only symbolic as the supplementary foods are introduced much earlier - in the second or third month itself.

### *Opinions and awareness*

Ninety nine percent of women believed that breast milk is best irrespective of their education and economic status. Women who were graduates or postgraduates had partial or complete knowledge about the composition of breast milk while those who were illiterate and semiliterate were unaware of it. Breastfeeding was considered disadvantageous for women working in organised sectors. Some women felt that breastfeeding led to weakness and feverishness. A few women from the middle income group, especially those who had studied upto the prematriculation and matriculation levels, felt that women lose their charm and figures due to breastfeeding but for the sake of the child's health and pressure from the family elders a few women continue to breastfeed.

The desire to remain young and slim by avoiding breastfeeding is neither medically approved nor socially respected. In fact, breastfeeding helps in regaining a normal posture and shape. There is a misconception among some people regarding the size of the breast and the amount of milk production; some women expressed the belief that the size of the breast influences the amount of the milk production. Surprisingly, a mother who is a doctor herself believed this.

Aruna (not her real name) who is an MBBS doctor, had a Caesarian section due to foetal distress and the child was born premature. The child was kept in an incubator for 15 days after which Aruna used to breastfeed it 6-7 times a day and six times during the night along with Lactogen. She weaned the child after six months; she could not breastfeed as she had insufficient milk and attributed this to her flat chest.

### **Summary**

The above findings indicate that women who initiated breastfeeding soon after the birth of the baby and frequently suckled the baby both during the day and night for a longer duration, and those who demand-fed their babies were

successful breastfeeders. A mother's psychological ability to think positively that she can produce enough milk is very important. Women who were under stress and anxiety failed to breastfeed for long.

The study shows that Caesarian deliveries are becoming increasingly common in private hospitals among the upper and middle income groups. This suggests that such deliveries are often performed more for commercial reasons than out concern for the survival of either the mother or the child. A Caesarian section appears to be an obstacle to successful breastfeeding. It delays initiation and makes breastfeeding uncomfortable. However, if it becomes inevitable, the mother needs greater support and determination to breastfeed. She needs to put in more effort. She should try to feed as early as possible, feed frequently and for a longer time at each feed.

When a minor change in the breastfeeding schedule occurs, mothers become nervous and frustrated thinking that they are unable to produce adequate milk for the growing child. This doubt and the consequent psychological pressure forces them to resort to bottle feeding.

### **Prospects**

The recent research related to the clinical aspects of breast milk and the psychological implications of breastfeeding for child development have given a new impetus to the practice. Moreover, breastfeeding is being adopted as an expression of self-fulfillment. The importance of breastfeeding has been so widely realised that the World Health Organization conducted a study on breastfeeding in nine countries in the 1980s. Even a 'World Breastfeeding Week' is being observed in the first week of August. However, merely studies, surveys and seminars on breastfeeding cannot do much, unless its advantages are more effectively and more widely propagated to the common people.

Breastfeeding is not so natural as it is thought to be. It has to be practised, learned, and it needs a lot of determination, patience and effort on the part of the mother. A strong determination to breastfeed and the patience to get up and feed at frequent intervals help the mother to become a successful breastfeeder. Positive thinking by the mother who feels confident of producing enough milk for the baby can extend the period of breastfeeding.

Although the rate of decline in breastfeeding practices in India is not alarming, it is necessary to check the declining trend particularly in urban areas through various methods in light of the experiences of other countries.

A more practical way to encourage breastfeeding is to form voluntary organisations, associations and groups as done in many countries worldwide. The oldest 'La Leche League International Inc.' founded in 1956 in the U.S.A, is the biggest breastfeeding women's group; it has published a manual, "The womanly art of breastfeeding". Besides the U.S.A., there is the 'Nursing Mothers' Association' in Australia, 'Independent Working Groups on Breastfeeding' in West Germany, 'Malaysian Breastfeeding Advisory Association in Malaysia,'Susu Mamas' in Papua New Guinea, 'Singapore Breastfeeding Mothers Group' in Singapore, TIBS-'The Informative Breastfeeding Service' in Trinidad, 'The Nutritional Child Trust' in the United Kingdom and many more are working successfully throughout the world.

The members of these groups work through group discussions, and telephone and letter counselling. They have libraries which lend literature, films and slides free of charge. Specially trained members of the associations give antenatal and postnatal talks to mothers at hospitals and at childbirth educational classes.

Printed materials, posters and newsletters on the advantages of breastfeeding and how to assist mothers should be produced. Special pamphlets prepared on topics such as excessive crying, sore nipples, too little milk, twins, breastfeeding when the mother is hospitalised, feeding of premature babies, breast refusal, supplementary feeding and weaning should be prepared and circulated among newly delivered mothers. Media like the television and radio also have an important role to play in making breastfeeding a nationwide slogan for the healthy future of the mother and child.

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