Chapter – I

INTRODUCTION

Satisfactory breastfeeding is by far the simplest, best, of all the methods of infant feeding. The difficulty is that mothers do not find breastfeeding satisfactory.

- Frank. E. Hytten

BACKGROUND OF THE STUDY

Imagine that the world has invented a new “dream product” to feed and immunize every one born on earth. Imagine that it is available everywhere, requires no storage or delivery and helps mothers.

Imagine then, that the world refuses to use it.

Towards the end of this 20th century of unprecedented discovery and invention, even as scientists discover the origins of life itself, the scenario is not, alas, a fiction. The ‘dream product’ is nothing but human breastmilk, available to us all, at birth, yet many hesitate to use.

Of the worlds’ 4,237 species of mammals Homo sapiens (human beings) are, the only one, threatening natures’ proven method of caring for its newborns.
'Just as there is no substitute for mother’s love, there is no substitute for mother’s milk.'

Breastfeeding has innumerable advantages. Breastfeeding is the fundamental for the health and development of the children and is also an inevitable factor for the health of mothers. There is no apt time in human life, when body grows, develops, attains maturity and proceeds at a faster rate, than in early infancy. Consequently during this time the nutritional deficiencies are prone to develop if the feeding practices are inadequate.

Breastfeeding provides the best start to life. It provides natural, ideal nutrition to babies, contributes towards a positive enhancement of cognitive development, protects them from infections, chronic diseases and prepares the babies for enhanced learning and thereby ensures them a head start.

**ADVANTAGES FOR THE BABY**

**Psychological Advantages**

Early mother-infant contact even for few minutes assures positive experiences for the mother and the infant. As breastfeeding provides frequent interaction, between the mother and the baby the
baby gets closer relationship with mother, which strengthens the bonding process, being the stimulating factor for psychomotor, cognitive and social development for healthy and emotional growth of the baby.\textsuperscript{6,7,8}

**Nutritional Advantages**

Breastmilk decidedly superior to other milks and its composition cannot be mimicked even by expensive formulae. Breastmilk is better digested, absorbed and utilized by infants’ immature gastro intestinal tract. Breastmilk contains complete mixture of vitamins, minerals, carbohydrates, proteins and lipids like DHA, AA that are found in the grey matter and retina and pre-cursors of LA. LA are the best and the only proven source of fat and essential fatty acid in the infants’ diet which is essential for the growth of the brain which is rapid in infancy.\textsuperscript{9}

**Growth and Development**

Growth is the key indicator of a child’s health. Growth was observed to be above 50\textsuperscript{th} percentile only among the breastfed infants. Almost one out of every 2-3 children suffer from some degree of growth failure.\textsuperscript{10} About 27 million children are born every year in
India of which 1.9 million die by the age of one year and 2.5 million die by the age of five years. To ensure human resource reaching, its optimum development, it is essential that every child gets adequate breastfeeding.\textsuperscript{11}

A study conducted in UK, on 7800 children (at 10 years of age) revealed that the children who had been exclusively breastfed for >3 months scored significantly higher in verbal tests at 5 years and 10 years in language tests, and also in reasoning and perception skills. The author speculates that the reason for this difference is that the level of micro-nutrients in formula milk are sub-optimal at a critical period of growth, during which the differentiation of nerve tissues takes place.\textsuperscript{12}

**Protection against morbidity and mortality**

In general, numerous studies support the fact that the breastmilk protects infants from many pathogens. The repertoire of antibacterial, antiviral, antifungal, antibodies in breastmilk is determined by the antigens the mother ingests, inhales and thereby producing specific antibodies.\textsuperscript{13}

As per WHO estimates, breastfeeding can prevent an average of 1.5 million infant deaths every year.\textsuperscript{11}
Breastfeeding has a strong, protective effect against gastrointestinal infections. The breastfed infant is four times less likely to die from respiratory infections. Besides, there is a significant reduction (fivefold) in the incidence of UTI in exclusively breastfed infants. It also gives protection from many infectious and non-infectious diseases.\textsuperscript{14}

**Long-term benefits**

Breastfeeding is protective against hypertension, obesity, higher cholesterol levels, which also has long-term effect on cardiovascular diseases.\textsuperscript{15}

The increased insulin release in formula fed infants, leads to fat deposition, which may affect the number of cells as well as fat content of adipose tissues which predispose them to adulthood obesity\textsuperscript{7} and NIDDM.\textsuperscript{16}

**Advantages for High Risk Infants**

The mother’s milk of the pre-term infants offers more nutritional advantages. It has higher energy, protein, fat, sodium, lesser concentration of lactose, calcium, phosphorous, higher
anti-infective factors than mothers of term infants.17 Fat absorption is enhanced.

Contemporary research shows that breastmilk is by far the safest for Low Birth Weight (LBW) infants.18 Mothers’ milk should be used for enteral feeding in infants weighing less than 1000gms and it is better tolerated and there is also evidence of late neurological and developmental advantages.

Breastfeeding is advised also for mothers infected with HIV. In countries where HIV prevalence is common, the replacement feeding by HIV infected mothers should not be generally encouraged until after the infant is 3 months old.19

ADVANTAGES FOR THE MOTHER

Physiological Advantages

Early breastfeeding enhances the necessary initiation of lactation stimulation for the production of colostrum, which reduces the breast and nipple problems.9

In remote health care settings, in cases of prolonged III stage, where there is no facilities for giving intravenous fluids, anesthesia,
where manual removal of placenta is dangerous, putting the baby to
the mothers’ breast provides the necessary stimulation for oxytocin
secretion and uterine contraction in most of the cases, to deliver the
placenta. Breastfeeding also hastens uterine involution.20

Psychological Advantages

Mothers, who breastfeed frequently finds it a pleasurable
experience and expresses a sense of greater satisfaction, achievement
and success with mothering role. Psychiatrists have suggested that
satisfactory breastfeeding-experiences tend to decrease the incidence of
emotional disturbances and depressive disorders in later life. 21

Family Welfare

Breastfeeding is a highly reliable method of spacing.
By postponing next pregnancy, it decreases the likelihood of unwanted
pregnancy. The likelihood of conception increases (7.4%) after menses
return.22

The variable effect of lactation on postpartum fertility may not
depend on the intensity of nursing per se but rather an energetic stress
that lactation represents for. 23
Advantages to the General Health of the Mother

Breastfeeding improves metabolic profiles of mothers though it causes apparent bone loss.24 Surprisingly there was reduced risk of hip and spinal fractures, as per epidemiological studies after menopause. Breastfeeding reduces the risk of ovarian cancer, postmenopausal breast cancer and uterine cancer.25 There is immense association, between breastfeeding and obesity as shown by many studies.26

Economical Advantages

Breastfeeding is eco-friendly. The list of advantages is growing everyday and all the advantages are not yet known presently.9

Factors Affecting Breastfeeding

Breastfeeding is simply and certainly an endangered practice.5 Breastfeeding has been in practice in our planet for more than 400,000 years, but it is only in the last few decades that its benefits have been scientifically established. Unfortunately, many perinatal practices and rituals currently in vogue, in homes and maternity homes, interfere with the bonding of mother infant pairs.9

But breastfeeding is not a simple process; it needs a complex relationship between two people, influenced by beliefs and the
emotional condition of the mother, characteristics of the child, time, availability, social support, and cultural patterns.6

Infant feeding in general and breastfeeding in particular are very personal and emotionally charged subject. If a baby is put to the breast immediately on delivery, subsequent lactation is much more likely to be successful. The milk ejection or oxytocin reflex is very sensitive to mother’s thoughts, feelings and sensations. Usually her feelings help the reflex but sometimes they hinder it. 6

Care for early initiation of breastfeeding, education and motivation of mothers, play a key role in building positive sensations for successful breastfeeding. A successful first feed is likely to make the mother feel that her baby likes her, and this may be crucial to the continuance of breastfeeding for short or long-term. There are many other advantages of breastfeeding at the early minutes of life, viz. satisfactory establishment of milk supply, longer, successful and exclusive breastfeeding, lessening of problems like failure to thrive, behavioral, emotional problems and infant battery. Rooming in facilitates frequent breastfeeding has strong positive influence. Successful breastfeeding contributes to the psychological overtones for
the mothers and also for the infant which is of far greater resonance than the simple feeder-fed relationship.27

In a number of developing societies breastfeeding is a universal practice. In other cultures, particularly in India and parts of South East Asia, there is a strong belief that colostrum is highly undesirable.9 Prelacteal feeds of sweetened water, goat milk, or diluted cow milk are commonly given in the first 2-3 days postpartum.28

Mothers and grandmothers reported that one should wait until the baby shows signs of hunger before giving any kind of foods.29

The World War I saw the beginning of food technology, which became a speciality by the time the World War II ended. Food technology had brought changes in infant feeding practices. At the same time, social thinking on life style of women also changed. Breastfeeding was considered a burden and believed that it could be substituted by milk powders. Consequently, breastfeeding declined sharply. These ideas made an entry and flared up among the educated elite.30 Later it was followed by poor women who started working in the industries in urban areas.31
It is commonly believed that breastfeeding is a natural phenomena and proceeding smoothly and uneventfully in villages. Low socio-economic status, low parental education and large family size adversely affect the morbidity and breastfeeding tends to counteract these influences. Unhygienic practices including inadequate bottle hygiene makes the situation worse. 32

**Overcoming The Problems In Breastfeeding**

Health care providers perceptions that they are important source of influence on mother’s infant feeding decisions, positively correlates with breastfeeding practices. Few, if any aspects of child care having suffered more buffeting to and fro by the minds of medical fashion than practice of infant feeding. Mothers who are given positive advice about breastfeeding are much more likely to breast feed and continue the practice. When hospital, feeding policy was revised in accordance with the ten steps for successful breastfeeding of UNICEF and WHO, more newborns were put to breast in the first hour of life, and more mothers received breastfeeding guidance from hospital staff, revealing the key role of health care providers.33

The relationship between maternal education and breastfeeding practice is complex. Education increases both the ability to earn and to
appreciate the importance of breastfeeding. The income tends to undermine breastfeeding, particularly in urban areas, as the caregiver’s opportunity for job and cost of time increase and the ability tends to promote breastfeeding, particularly, in supporting workplace environments.34

As the mother’s educational status seems to have a profound influence on infant feeding practices, the imparting of knowledge about benefits of breastfeeding and the difficulty in reversing the decision of not to breastfeed might influence those, who have not already made a decision, or those whose decision is not final.35

Despite the fact that breastfeeding is a physiological process, many women experience difficulties in establishment of breastfeeding. This underscores the need for breastfeeding support. Thus, the great asset, a nursing mother can have, is the support of an experienced and sympathetic counselor with a positive attitude who may be a midwife, doctor, health visitor or lay person and has the chance to make fully informed choice and free from any commercial influences.36

The benefits of breastfeeding are inimitable by artificial feeding. Breastfeeding needs to be promoted by means of education and
counseling, supported by means of assistance to initiate early and to adopt proper technique, solve feeding problems and the most important factor that it needs to be VALUED.  

**NEED FOR THE STUDY**

“Unless investment in children is made, all of humanity’s most fundamental long term problems, will remain fundamental long term problems”

–James P Grant, Executive Director, UNICEF (1995)

The foundation of a country’s most important nutritional problem is growth retardation in infants and young children, which is laid down before the completion of first year of life. The quality and strength of childhood foundation is provenly determined by the kind of nutrition provided to vulnerable segments of the population. On good breastfeeding practices, National Family Health Survey (NFHS II 1988-99) recommended exclusive breastfeeding and continued breastfeeding beyond 2 years as the key behaviours to prevent infant morbidity and mortality and ultimately poverty.

“Poor infant feeding practices and their consequences are of the world’s major problems and a serious obstacle to social and economical development”

Breastfeeding is a practical and economically efficient which needs very little investment but gives invaluable returns to the family,
community and to the nation. Though breastfeeding has been practiced since the origin of the species, there has been a global decline in breastfeeding in general and exclusive breastfeeding in particular. The decline continues despite efforts at various levels in developing and developed countries. All over the world, babies are born in an unfriendly environment. If children’s lives are to be saved, the will of everyone, from parents to decision makers, must be constantly prodded as breastfeeding is the most crucial factor in child survival far surpassing immunization, supplementation and it is essential for the highest attainable standard of health for the citizens of tomorrow’s world.33

**Incidence of Exclusive Breastfeeding**

The NFHS – II (National Family Health Survey, 1998-99) collected data representative samples across the nation of more than 90,000, ever-married women, aged between 15-49 years. Sample covered 99% of India’s populations living in 25 states. The survey revealed that in Tamilnadu early initiation of breastfeeding less than an hour was only 50.3% and majority of the mothers initiated breastfeeding after 24 hrs. Exclusive breastfeeding at 0-3 months was 48.3%, and current level of complementary feeding of infants aged 6-9 months was 55.4%. The goals for the Tenth 5 year plan (2010) is set
for an increase of exclusive breastfeeding at 70% during 0-3 months. The survey recommended that the country requires major thrusts in the areas of female literacy, female empowerment, female socio-economic independence if we are determined to achieve major reduction in the under five age group mortality in future.40

A research study was conducted (2001) in Cuddalore, Tamilnadu by Kalavathi (n=500 mother infant pairs) which revealed that exclusive breastfeeding at 4-6 months was only 24%. Out of 500 mothers 61% believed that commercial foods are more nutritious and 76% believed that baby should not be fed frequently, 57% believed that cow milk is to be given to the babies after dilution.28

A research study conducted at Coimbatore, Tamilnadu (1999) revealed that majority of mothers initiated breastfeeding only 12-18 hours after the birth and colostrum was given only by 47% mothers. The tragic results also showed that sizeable number of mothers (80-90%), gave pre-lacteal feeds. Also the number of mothers partially breastfeeding was significantly lesser (36%) after 3 months.42

A study by Nielson et al (1998) in Tamilnadu, revealed that only 21% of mothers initiated breastfeeding in <2 hrs and median initiation time was 11 hours. 43
The following tables reveal the incidence of exclusive breastfeeding in India and other countries.

### Incidence of Exclusive Breastfeeding in India

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Area of Study</th>
<th>% of mothers breastfeeding exclusively</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suvrapathi<strong>44</strong></td>
<td>2005</td>
<td>South Orissa</td>
<td>43%, at 1-2 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9%, at 6 months</td>
</tr>
<tr>
<td>BPNI<strong>45</strong></td>
<td>2004</td>
<td>India</td>
<td>40%, at 6 months</td>
</tr>
<tr>
<td>Jadoun<strong>46</strong></td>
<td>2004</td>
<td>Udaipur City</td>
<td>8.2%, at 6 months</td>
</tr>
<tr>
<td>Bhandari et al.,<strong>47</strong></td>
<td>2003</td>
<td>Harayana</td>
<td>58%, at 3 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12%, at 4 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6%, at 5 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4%, at 6 months</td>
</tr>
<tr>
<td>Kalavathi S.,<strong>28</strong></td>
<td>2001</td>
<td>Tamilnadu, Cuddalore District</td>
<td>90% at 3 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24% at 4-6 months</td>
</tr>
<tr>
<td>S.P. Singh, P. Sen<strong>3</strong></td>
<td>2001</td>
<td></td>
<td>50%, at 3 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>75%, at &lt; 4 months</td>
</tr>
<tr>
<td>Dipika Sur et al.,<strong>48</strong></td>
<td>2001</td>
<td>Calcutta</td>
<td>70%, at 4 months</td>
</tr>
<tr>
<td>UNICF<strong>49</strong></td>
<td>2000</td>
<td>Cluster Survey, India</td>
<td>15.6%, at 3 months</td>
</tr>
<tr>
<td>Ravichandran<strong>50</strong></td>
<td>2000</td>
<td>Chennai</td>
<td>89.5%, at 3-4 months</td>
</tr>
<tr>
<td>Chatterjee et al.,<strong>51</strong></td>
<td>2000</td>
<td>Railway Employees High income educated, Group</td>
<td>50-55% 3-4 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>62% 3-4 months</td>
</tr>
<tr>
<td>Rajammal P Devadas et al.,<strong>42</strong></td>
<td>1999</td>
<td>Coimbatore District Tamilnadu</td>
<td>36% &gt; 3 months</td>
</tr>
<tr>
<td>Chhabra et al<strong>52</strong></td>
<td>1998</td>
<td>Delhi Urban Colony Illiterate Group</td>
<td>46% 3-4 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51% 3-4 months</td>
</tr>
</tbody>
</table>
Incidence of Exclusive Breastfeeding in Other Countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Area of Study</th>
<th>% of mothers breastfeeding exclusively</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onayade et al.,</td>
<td>2004</td>
<td>Nigeria</td>
<td>76.5%, at 6 months</td>
</tr>
<tr>
<td>Mash et al.,</td>
<td>2003</td>
<td>Ethiopia</td>
<td>24%, &lt; 6 months</td>
</tr>
<tr>
<td>Cossio et al.,</td>
<td>2003</td>
<td>Mexico</td>
<td>26%, at 4 months 20%, at 6 months</td>
</tr>
<tr>
<td>Merten S. et al</td>
<td>2003</td>
<td>Switzerland Other Hospitals</td>
<td>42%, at 5 months 34%, at 5 months</td>
</tr>
</tbody>
</table>

The need for breastfeeding education is urgent and should be taken up on a war footing with a message that colostrum is to be given to newborns within half-an hour of birth.\textsuperscript{57}

An infant, incapable of demanding food by himself, is solely dependent on his mother for his nutrition and the type of feeding is determined largely by socio-cultural factors rather than its availability. Little effort has been made to promote and protect breastfeeding which is believed to be a primary prevention method to put an end to almost all types of infant morbidity and mortality.
FACTORS AFFECTING BREASTFEEDING

After childbirth a sense of relief and calm descends on the mother. There exists a sensitive period for the mother to have close contact with the baby probably because of the effect of oxytocin surge. She is alert and calm for next half an hour, after which she goes to sleep, which could extend for six to eight hours. Similarly the young one is alert and awake for 20-30 minutes. He makes sucking noises as the sucking reflex is stronger at this point and is looking around and very active due to an intense surge of catecholamines. After half an hour the baby, like his mother, also goes to sleep for six to eight hours. There is evidence to show that a newborn, given an opportunity, can move towards the mother’s breast, root for the nipple, attach and initiate breastfeeding. The first breastfeed can last as long as 20 minutes. Hence, it is vital to understand this important physiological state and the need to place the baby next to its mother immediately after birth, to get a close bond and to breastfeed.\(^{38}\)

As the mothers are discharged after delivery within 2-7 days, the period during which only breastfeeding gets established the established breastfeeding may not continue after discharge.\(^{21}\)

Several studies indicate that the interest, satisfaction and willingness of mothers have positive influence on breastfeeding.\(^{20}\)
Some mothers certainly are very lucky. They breastfeeding their babies without any difficulty but some find it very difficult and depend on milk substitutes.59

Successful lactation also depends upon the presence of strongly motivated husbands, whose inspiration and support play vital roles.

Inconvenience, working away from home, absence of maternity benefits (maternity leave), interference of work or studies, non-availability of creches60 and non-availability of reasonable place to express, pump breastmilk or feed in the working place,18 are some of the factors which have negative influence on breastfeeding.42

Pre-lacteal feedings, avoidance of colostrum and delaying the first feed are common in Tamilnadu, even among the educated mothers who delivered at hospital providing the fact that higher the education lesser the breastfeeding.60

Knowledge and attitude are the potential, modifiable factors and the mothers’ attitude to feed the baby is the strongest, most consistent predictor of breastfeeding. Mass media plays an important role in promoting breastfeeding.61
ADVANTAGES
Breastmilk as a Vaccine

Breastmilk is a fresh, cheap, safe and orally administered vaccine requiring no cold-chain. It is the first immunization, which requires a ‘warm-chain’ of support, that is to say, the skilled care of breastfeeding mothers to build their confidence and guide them to protect their babies from harmful practices. If this warm chain disappears from the culture or becomes faulty, then it must be retained and revived by the health care services.  

Breastfeeding practices could save the country’s valuable foreign exchange that may otherwise be used for the import of milk. In addition to individual health benefits, breastfeeding contributes to financial security of the family. Breastfeeding provides significant social and economic benefits to the nation including reduction in the cost of health care, decreased employee absenteeism for care attributable to child illness, which allows the parents to devote more time for the sibling and for other family duties, decreases parental absence from work and loss of income. It provides, food, care, all at one.
Economic Value of Breastmilk Produced in India

Breastfeeding is ‘priceless’. Advocacy of exclusive breastfeeding requires an appreciation of its full importance by all sections of the society. Economic measurements cannot put a value on any expression of love or altruism. While the value of manufactured baby foods is included in the calculation of the Gross National Product (GNP), the value of breastmilk is omitted. The production capacity of a mother per child for 2 years is 346 litres and the realistic production by all the mothers in the country is 3944 million litres.

IYCF’s optimum practices include exclusive breastfeeding upto 6 months and continued breastfeeding upto 2 years along with complementary food, which helps the nation reduce poverty, as breastfeeding requires very little investment whereas the returns are invaluable to the families, corporate sectors, societies, health care institutions, and the governments.

Efficacy of Breastfeeding Education

Many studies reveal that the scientific knowledge about the mechanics of breastfeeding, support during lactational crisis, increased the initiation, duration and exclusiveness of breastfeeding.
A study conducted by Haider IP et al (2000) revealed that out of 244 neonates none was exclusively breastfed, due to lack of confidence among the mothers in their capacity to produce enough milk. Breastfeeding counseling enabled 64% of mothers to breastfeed exclusively.\textsuperscript{65}

Another study conducted on 60 mothers by Vijayalakshmi et al (2002) in Chennai revealed (30 experimental and 30 control group) that there was significant improvement in the knowledge scores after teaching through demonstrations and flash cards i.e. 42.14 versus 77.38 in the experimental group and 40.48 versus 51.19 in the control group.\textsuperscript{66}

A study conducted by Valder et al (1983) in a hospital at Santiago, Chile, (1993) revealed that hospital/clinic based breastfeeding programme which included antenatal breastfeeding education at 32 to 40 weeks of gestation period and 7 to 10 days postpartum showed that it was very effective when the infants were put to the breast immediately after delivery. Mean initiation time of first breastfeeding was 2.8hrs in the experimental group compared to 6.7 hours in the control group. At the close of 6\textsuperscript{th} month the
breastfeeding rates were 66.8% and 31.6% in the experimental and control group respectively.\textsuperscript{67}

**FEASIBILITY OF BREASTFEEDING EDUCATION**

Knowledge, feasibility, effectiveness and safety of educational intervention on exclusive breastfeeding by Bhandari et al (2003) was tested in 8 communities. In 3 months, exclusive Breastfeeding increased to 79% among mothers in the intervention group (n = 552) who received knowledge through counseling by health care and nutrition workers and in controls (n = 473) it was low at 48%.\textsuperscript{47}

Assistance and support from a lay person, who had minimal days of training had significant effect on infant feeding practices as found by a RCT done in Bangladesh by Haider et al (2000) where peer counselors increased exclusive breastfeeding rates to ten folds. (from 6% to 70% in 5 months).\textsuperscript{68}

Breastfeeding promotion is highly cost-effective comparable to immunization programmes. Nurses can play an influential role in creating awareness policy development and advocacy of breastfeeding. Face-to-face interaction with mothers, when they come for antenatal checkups, during delivery and early postpartum, is the
ideal period to discuss the advantages of breastfeeding and solve problems with breastfeeding if any. Involvement of influential persons in educating the mothers about breastfeeding may take only a few minutes for health-care provider but it could bring unimaginable profit to the country. So, increasing the exclusive breastfeeding rates requires behavioural changes and it is a process that can be achieved only through skillful acts and the midwives are in perfect position.69

So, any effort to undermine the poor utility of breastfeeding, which has the ‘gold standard,’ is highly detrimental to the health of the children, family, community and on the whole the nation.65 This underscores the need for the efforts, both from health care services and families, to be taken to educate mothers to adopt the generations old, cost effective and a powerful health strategy which has unparallel benefits.

Many studies were done and are being done to educate mothers regarding various aspects of breastfeeding in an effort to increase their knowledge or which would influence the practice of breastfeeding and achieve exclusive breastfeeding with increased rate and duration. The present study, also aims at imparting knowledge and to assist
mothers for early initiation of breastfeeding and thereby extending a little step in support of the campaign for promotion of breastfeeding in India.

**STATEMENT OF THE PROBLEM**

A study to assess the Efficacy of Education on Breastfeeding and the Early Initiation of Breastfeeding among mothers admitted in a Rural Hospital, Tamilnadu.

**OBJECTIVES OF THE STUDY**

1. To compare the bio-physiological parameters between postnatal mothers in the control group and experimental group.
2. To compare the bio-physiological parameters of babies in the control and experimental group.
3. To evaluate the effectiveness of early initiation of breastfeeding.
4. To evaluate the effectiveness of education on breastfeeding.
5. To correlate the personal, family, obstetrical, parameters of mothers in control group, with their knowledge on selected aspects of breastfeeding.
OPERATIONAL DEFINITIONS

Efficacy : In this study efficacy refers to the improved knowledge and practice of mothers on breastfeeding following education and early initiation of breastfeeding.

Education on breastfeeding : Education on breastfeeding refers to providing accurate information; building confidence and timely counseling.

- IBFAN, Asia Pacific, 2006

Early Initiation : Refers to Breastfeeding the newborn babies within half to one hour of birth.

Breastfeeding : Refers to a process by which an infant suckles breastmilk from his or her mother.

Mothers : Refers to mothers at term gestation with normal obstetrical history upto 3 days postpartum.

ASSUMPTIONS

1. Successful breastfeeding probably depends more on the mother’s willingness to breastfeed.

2. Creating an awareness about the benefits of breastfeeding will improve baby care practices of mothers with special regard to optimal breastfeeding practices.

4. The fact that breastfeeding is important for the health of the baby would make the mother more receptive to breastfeeding education.

5. Health-care providers’ attitude, support, guidance and encouragement may have significant influence on the mothers’ feeding decisions.

HYPOTHESES

1. Mothers, those who have initiated breastfeeding early, will have better attachment with their babies than the mothers in the control group.

2. Mothers, those who received education on breastfeeding, will have more knowledge and desirable practices than mothers who have not received education on breastfeeding.

3. The bio-physiological parameters of mothers who received the intervention i.e. care for Early initiation of breastfeeding and Education on breastfeeding will be better from that of the mothers in the control group.

4. The bio-physiological parameters of babies who received the intervention i.e. care for Early initiation of breastfeeding and Education on breastfeeding will be different from that of the babies in the control group.

CONCEPTUAL FRAMEWORK

Jean Ball – The Deck-Chair Theory of Maternal Emotional Well-Being (1987)
The purpose of all maternity care is to enable a woman to be successful in becoming a mother, and this success applies not only to the physiological process involved but also to the psychological and emotional processes which motivate the desire for parenthood and its fulfillment.

It has become a practice in many organizations, once the delivery has been achieved, that the postnatal care continues to be the Cinderella of care of the childbearing woman.

The theory, Jean Ball – The Deck Chair identifies pregnancy and the postnatal period as a time of adoption of a new role. Also the emotional response of women, to the changes which follow the birth of the baby, will be affected by their personality and by the quality of support they receive from family and social support systems. The way in which the care is provided by midwives, during the postnatal period will influence the emotional response of the women to the changes which follow the birth of a child.
CONCEPTUAL FRAMEWORK
Figure 1: The Deck-Chair Model of Support Systems for Maternal Well-being

Maternal Factors
- Mother’s Personality
- Mother’s self-confidence
- Previous experiences
- Satisfaction with motherhood
- Positive feelings after birth
- Mother’s rating of baby’s progress
- Positive self image in feeding in first 3 days

Family support system

Maternity Services
- Individualized flexible care planning.
- Education for Breastfeeding
- Assistance for Early Initiation
- Conducive ward atmosphere
- Co-ordination with professional groups
Good score on all these factors (Figure 1) would result in a high degree of emotional well-being, while the poor score on all of them would result in considerable distress.

A woman’s well-being, immediately after the delivery, is dependent on her personality, personal support system and the support provided by the maternity services. The interrelationship of these three elements is shown in figure as a deck-chair. The base of the chair is formed by the maternity services, the side-strut stands for the woman’s self-confidence, personality, life experiences, and so on and the central strut represents her family and support systems. The woman’s maternal wellbeing, the seat of the chair is dependent on the effective synchronization of these elements.

The deck-chair can have similarities to the action framework in which the views of the society, the individual’s definition of the situation and the organization of maternity services continue and contribute to the desired action – the woman’s maternal well being.

If the deck-chair is not erected properly, it will collapse under the weight of its occupant; if it does not stand on a firm base it will fall
over with similar results; and if the parts do not fit together well, the occupant may be held up rather become uncomfortable and strained.

The midwife acts as a strengthening force for the base of the deck chair, providing knowledge about breastfeeding and assisting the mother to initiate breastfeeding within ½ to 1 hour of delivery. This will enhances the confidence of a woman in breastfeeding a child and contributes to develop positive feelings after birth, more over it will lead to a positive self image and satisfaction with motherhood as this makes her feel happy that baby is progressing well. By establishing a relationship of trust and ensuring co-ordinated care the midwife offers congenial atmosphere in the postnatal ward. All these contribute to strengthen the side strut, which is the mother’s personality-resulting and ensuring positive feelings after birth to bring happiness to the family, which is the central strut. Thus, the midwife makes sure of fitting all the parts of the deck-chair in a proper manner i.e. the central strut and side strut are fitted at the base which supports the seat of the deck chair - the well being of the mother.

If the factors mentioned above, are not taken care of, if individualized care is not given, breastfeeding education and initiation
of breastfeeding within ½ to 1 hour are not taken care by midwife, leads to weakening of the base and the mother may have negative scores on the afore mentioned parameters which directly affects the side strut (her personality, self-image, confidence and satisfaction with mothering role) and also the central strut which is the family, who may also be in anxiety as mother is not feeling good about baby’s progress and mothering role, which causes discomfort affecting her well being, ultimately the parts of the deck-chair not fitting well, leading to collapse of the chair.