CHAPTER - I

INTRODUCTION

BACKGROUND OF THE STUDY

"Give your baby the best"
"First feed at the breast"

(Baby Friendly Hospital Initiative, 1993)

Human breast milk, nature's perfect gift, is vastly superior to anything available from our most sophisticated technologies. Breast feeding is the most effective way to provide a baby with complete food and protection and with a caring environment.

From the movement of birth up to the age of an hour-to-six months, breast milk is the only food and drink that a baby needs. No other milk, whether animal or powdered milk, can compare with this species specific breast milk. Breast milk offers the best balance of nutrients, proteins, carbohydrates, fats, minerals, vitamins and water, in right quantities to meet the growth and developmental needs of babies. It also has a variety of protective factors.

Babies are born with an inexperienced immune system and so are prone to infection which only mother's milk can help combat. Protective substances in mothers milk protects babies not only from infection, but also from allergies, unlike animal and powdered milk which lacks such protective substances. The protective substances in breast milk are
Immunoglobulins, secretory IGA which coats the mucus membrane of the baby's gastrointestinal tract and protects the baby against common infection until the baby can make his own antibodies. Leucocytes (Lymphocytes and Macrophages) are cells which fight against infection. Bifidus Factor helps special bacteria called Lactobacillus bifidus to grow in the baby's intestine, which in turn prevents the growth of harmful bacteria causing diarrhoea, lactoferrin binds iron, preventing the growth of harmful bacteria which need iron. Lysozyme destroys bacteria.

A breast fed child is less likely to die or become ill, especially when exclusive breast feeding is practiced for the first 4 to 6 months.

Breast fed babies are less to prone to the insulin dependent diabetics, atherosclerosis, demyelinating disorders. Bottle feeding can lead to serious illness and death. Cow's or buffalo's milk, powder solutions and other instant food by bottle do not give babies any protection against diarrhoea (BFHI, 1993).

Fortunately, increasing number of health workers are following maternity home practices conducive to successful breast feeding, at the same time, a large number of hospitals around the globe continue to follow outmoded practice, that are detrimental to the establishment and maintenance of breast feeding.

Breast feeding has now become a serious issue in public health and clinical medicine.
The industrial revolution in the west in the 19th century meant a sudden change for much of the population from a subsistence economy to wage earning. It also meant that many mothers with babies had to work away from home, most often in factories, in order to earn enough to substitute family income. All these changes created potential market, though not an outright demand for feeding bottles and commercial instant food. The first of which was marketed more than a hundred years ago, (1993) Nursing Journal of India.

Helzing Elizabeth (1981) states that "Modern" era of artificial feeding dates back to the beginning of this century.

The attempts to work out an artificial substitute for human milk were made just after World War - I in 1919. The availability of an increasing variety of infant foods, both commercial and homemade caught an attention of pediatricians, who took it upon themselves to establish scientifically acceptable, general rates for infant feeding on the basis of the calculated nutritional needs of various ages, they recommended 3 to 4 hourly interval between feeds.

The decline in breast feeding, which has occurred in most industrialized society's since 1930 onwards, seems superficially to effect women's desire to be inclined to the choice of breast feeding, same women deliberately chose not to breast feed for a variety of reasons, psychological as well as practical. Many gave up despite a firm desire to breast feed. Many others were undecided even after they give birth, but get
discouraged when difficulties arise due to inappropriate advice and inadequate support from family members regarding breast feeding.

Breast Feeding Promotions Network of India (1993) states that reasons given by most mothers is that their own milk is not adequate. This is a common feeling among all mothers, some of them have misconception that top milk, especially tinned milk food, is superior to breast milk. Why is the feeling of inadequacy of their breast milk generated among most of the mothers. They agree that the baby chews hands, the baby is fussy at breast, the baby demands feed more frequently, baby is satisfied and sleeps well when given a top feed, the baby does not gain weight, breasts are soft and milk does not drip.

All these arguments are not indications of inadequacy of breast milk. Some of these may well mean that the baby wants to take to the breast more frequently. If the baby sleeps well after giving top feeds, it is due to the fact that top milk takes 3-4 hours to be digested. Where as breast milk takes only about 1½ to 2 hours. It is not necessary for milk to drip, breast may be soft or small they can still produce enough milk for the baby. The real indicators of having enough milk is the baby is passing urine about 6 times a day and gaining weight adequately, more than 500 gms a month.

The causes of not having enough milk in the urban and rural community mothers are top feeding, which is started too early, mother missing night feeds, restriction in baby’s feeding at lack of confidence in
mother, her anxiety and worries of baby not correctly positioned at breast, baby having nipple confusion. If being bottle fed, mother has a painful breast problem or takes contraceptive pills, looking at each of these causes, which could produce a sense of inadequacy, each one can be solved (Gupta, 1993).

Recent literature suggests that supplementary and complementary feeding interferes with lactation and might result in infection and allergy.

According to Helsing the most common cause of lactational failure is premature and unnecessary supplemental feeding. When lactation is not going well, a bottle may aggregate problem.

The natural immune factors present in breast milk give the baby the necessary abilities to fight major childhood killer diseases, such as diarrhoea, gastrointestinal diseases and respiratory infections.

Hence, babies should be fed exclusively on breast milk alone for first six months.
NEED FOR THE STUDY

"Breast milk is the best milk"

All foods cost money, but mothers milk is free

Mother's milk passes straight from the breast in to the infant's mouth, in this way it can not get infected with germs and does not make the baby ill. Breast milk is clean and free of bacteria. Breast milk substitutes such as animal and powdered milks are easily contaminated with germs from flies, dirty hands, unclean water and feeding utensils. Milk and utensils need sterilization prior to every feed. Breast milk protects against a lower incidence of ear infections and orthodontic dental problems. A lower risk of diabetes, heart diseases, hypertension and cancer.

The presence of epidermal growth factors in breast milk helps the baby's gastro intestinal tract to develop and mature more quickly thus preventing foreign proteins from entering the system. Thus breast fed babies are less likely to develop allergies like eczema and asthma even in situations with a positive family history.

Breast feeding permits a closeness between the baby and mother. The contact which includes touching, warmth, smell, look, sound, gives a feeling of security and love to the baby and mother is associated with better social and emotional development and higher intelligence.
Stimulation of the nipple through breast feeding is responsible for the release of two hormones in the mother, prolactin and oxytocin. Oxytocin contracts the utery which in turn helps deliver placenta and controls bleeding after delivery. Prolactin has an important effect on suppressing the function of the ovaries which in turn delays the return of menstruation fertility and provides protection against another pregnancy. Breast milk lowers the risk of ovarian cancer.

Breast milk decreases mothers work load by saving time and energy. Breast feeding makes night feeds and travel convenient. It alleviates worry about milk spoiling or running out of supplies. Breastfeeding saves money and time and conserves energy.

All food cost money but mothers milk is free

Breast feeding contributes to child survival, decreases health care costs, provides natural way to help space pregnancies. It decreases government spending for formula milk, saves foreign exchange, decreases the pollution of air and saves (for fuel) one earth’s resources, including trees Breast milk has a unique biological and emotional influence on the health of both mother and child.

The prevalence and duration of breast feeding has declined in many parts of world for a variety of social, economic and cultural reasons.

With rapid urbanization, industrialization and modernization, many women started taking jobs away from homes, resulting in a decline in
breast feeding, adaptation of new life styles, has reduced the importance of traditional practice in many societies.

WHO / UNICEF statement (1993) states common examples of mother for stopping breast feeding are separating mothers from their infants at birth, giving infants, glucose water, sugar water honey, etc., by bottle and teat before lactation has been initiated, and routinely encouraging use of breast substitutes.

Few families especially in rural communities and urban communities and illiterate groups strongly believe that milk comes down to the breast only when Devi (Godess) comes and writes the fate and future of the baby after 3 - 5 days of delivery.

The researcher has witnessed the problems of breast feeding during her childhood itself as she was born and brought up in a rural community background.

In the year 1968 a village by name Tigadolli in Bailhongal taluk, district Belgaum followed traditional practices the mother resting after she has given birth because during this postnatal mothers are unclean, untouchable and even excluded from religious activity. The delivered mother was given a separate room without ventilation and light. They believed that exposure to cold and light initiates illness in baby and mother.
The woman was discouraged to breast feed the baby after delivery because the illiterate group of women strongly believed that milk comes down to the breast only when Shetybai (devi) comes and writes the fate and future of the baby after the 5th day of delivery. The mothers were forced by their grand mothers and women folk, to squeeze and throw the first flow of milk (colostrums) which they believed causes indigestion in the baby.

They also believed that sour food causes cold to the mother and baby. They encouraged mothers to give prelacteal feeds such as honey, sugar water and glucose water etc.

These customs and taboos had become a strain for the mother and some of them were unbearable burdens.

When milk first comes into the breast, breasts may feel uncomfortable, heavy, stony, hard, the enlarged and painful, a brief spike of fever, even a single rigor occurred. Such pain and stress can lead directly to a reduction of supply through inhibition of prolactin and oxytocin reflexes which reduces milk to the baby.

 Mothers of rural and urban community used support groups for help.

The investigator has also noticed problems in Diploma students of urban and rural community postings in a selected village of Belgaum District, and as a B.Sc. nursing (post certificate) student, at urban and
rural community postings of Nelamangala and Gavipuram Guttahalli and as a post graduate student (Master of Nursing) at Rajkumari Amit Kaur College of Nursing, Community Nursing at Chavala Maternity Unit of Safdarjan Hospital, New Delhi.

Hence the investigator wants to counsel the urban and rural community mothers regarding the importance of giving breast milk to their children with emphasis on: Correct concept of breast milk, Correct technique of breast feeding, Healthy practices of breast feeding, A child of today is the citizen of tomorrow.

Dr. Halfden Mahler's message for the world healthy baby (1994), "Children's health, tomorrow's wealth" lays emphasis on breast feeding and its role in prevention of malnutrition and infection among children.
STATEMENT OF THE PROBLEM

“A Comparative Study of Mother’s Knowledge, Attitude and Practice of Breast Feeding among Urban and Rural Communities in Selected Areas of Karnataka”

Objectives of the Study

1. To assess the knowledge of rural and urban mothers regarding breast feeding.

2. To determine the attitude of rural and urban mothers towards breast feeding.

3. To assess the practice of rural and urban mothers towards breast feeding.

4. To study the relationship between knowledge, attitude and practice of mother’s regarding breast feeding.

5. To compare knowledge, attitude and practice of breast feeding among urban and rural community mothers.

- Lactating mothers have some knowledge of breast feeding.

- All lactating mothers enjoy breast feeding.

Operational Definitions

1. It is the ability of the mothers to respond to the structured interview schedule regarding breast feeding as evident from their knowledge scores.
2. Attitude

Refers to the settled behavior manner, feeling or opinion of mothers towards breast feeding as measured by attitude scale.

3. Mothers

Lactating mothers having a child below 2 years of age.

4. Practice

It is referred to those practices that are being carried out by urban and rural mothers as evident from the observational checklist.

Delimitations of the study:

1. The study is delimited to only lactating mothers those who have not been admitted to the hospitals.

2. It is further limited to mothers who are free from medical and surgical conditions.

3. The study is delimited to lactating mothers who can understand kannada.

4. Knowledge of mothers was assessed only the verbal responses to the structured schedule.

5. Attitudes were assessed only by verbal responses Attitude scale.

6. Practices were elicited through verbal responses and observational checklist.
Conceptual Framework of the Study

A conceptual frame work is a group of concepts and a set of propositions that spells out relationship between them. Conceptual frame work plays several interrelated roles in the progress of science.

Plitt and Hungler (1995) states that a conceptual frame work is interrelated concepts on abstractions that are assembled together in some rational scheme by virtue of their relevance to a common theme.

The theoretical frame work for the present study is developed from Penders Health Promotion Model Pender, 1993, 1996).

Penders health promotion model seeks to increase an individual health promotion activities. The model focuses on cognitive, perceptual and modifying factors and participation in health promotion behaviour. The model also identifies factors that influence health promotion activities.

In the present study, the concept from Pender's health promotion model is utilized where urban and rural community lactating mothers act as an agent with their knowledge, attitude and practice in the breast feeding process, in promoting the health of infants.

To conceptualize the breast feeding process, one has to be clear about sequence of events in the normal process of breast feeding.

Milk production by itself is not sufficient to sustain successful breastfeeding. Milk must be given to the baby. Stimulation of the nipple is
brought about by the suckling action of the baby. This is necessary to keep the level of prolactin optimum in the blood.

The anterior portion of the pituitary gland produces a hormone called prolactin. Prolactin is responsible for milk production when the baby suckles at the breast, nerve endings in the nipple and areola are stimulated. These in turn carry messages to the hypothalamus at the base of the brain and the anterior portion of the pituitary gland to secrete prolactin. This hormone moves through the mother's blood stream to the breast, stimulating the epithelial cells to produce milk.

The events from stimulation of the nipple, to the release of prolactin and the secretion of milk is called prolactin reflex or the milk secretion.

The prolactin reflex depends on:
- how often the baby suckles
- how long
- how strongly
- how well the baby is attached at the breast

The more frequently, vigorously and effectively the baby suckles at the breast more milk produced.

The prolactin production of milk in the breast depends on the baby’s needs as well as the baby’s suckling action. If a mother is hungry baby and he suckles strongly, or if she has twings and they both suckle at
the breasts, then her breast supplies as much of milk as the hungry baby demands, and makes the extra supply of milk that the babies needs.

Thus, if a mother wishes to increase her milk supply the best way to do so is to put the baby to the breast more frequently and for longer period of time. Emptying the breast milk and breast feeding at night stimulates the release of large amount of prolactin which in turn makes more milk. The second hormone, oxytocin is produced by the posterior portion of the pituitary gland.

When the baby suckles at the breast, nervous impulses are also carried to the posterior pituitary, causing the release of oxytocin into the natural blood stream. Oxytocin stimulates the myoepithelial cells, which surround the alveoli, to contract. This causes milk in the alveoli to move along the small tubes and lactiferous sinuus, and drain through the nipple. These events are referred to as the oxytocin or milk ejection or let-down reflex. When the babies are put to suckle at the breast, mothers usually experience a squeezing sensation in the breast. This is a sign of "Let down".

The milk ejection can be stimulated even in response to the sight or sound of the baby, pleasant thoughts, feelings and sensations in the mother reinforce the let down reflex. On the other hand, the following factors may interfere with this reflex.

The mother’s lack of confidence about her ability to breast feed her baby.
The mothers worry / anxiety

The mother's embarrassment

*Lack of confidence and anxiety in the mother can interfere with the release and flow of milk to the baby*

Thus, adequate milk production and release depends on two hormones.

**Prolactin and oxytocin**

The birth of a baby is a stressful situation to the lactating mothers of urban and rural communities. The focus of the model is to explain the factors that influence the breast feeding process in mothers. For the infants, the safest and *Universally accepted pattern of feeding is breast feeding.*

Health promotion behavior of a mother i.e., giving breast feeding to her baby is influenced by many factors such as age, religion, educational status, occupation, type of family, number of living children, antenatal visits, previous history of abortion and still birth, emotional well being of mothers, psychosocial conditions and environment.

Urban and rural community mothers should believe that breast feeding is ideal food for her baby and also he aware of the advantages of breast feeding for her and her baby.
If the mothers of urban and rural communities have adequate knowledge, positive attitude and healthy practices (cognitive perceptual factors) towards breast feeding process, they are likely to engage in the breast feeding process (Health promotion behavior). It includes initiation of breast feeding within ½ an hour to 1 hour, following hygienic measures while breast feeding, following correct position and correct technique in breast feeding, avoids prelacteal feeds, feeds on demand, feeds from both breast at five minutes interval (at a time) ensures that the baby takes adequate feeds. If the knowledge, attitude and practice of mothers in breast feeding are inadequate, health promotion behaviour is interrupted which leads to illness in the child such as diarrhea, infection, respiratory infection.

The findings of this study would assist in identification of the learning needs of mothers in the breast feeding process and preparation of a course content for an effective inservice education programme for health personnel of urban and rural communities for successful management of breast feeding process.
CONCEPTUAL FRAME WORK BASED ON MODIFIED PENDER'S HEALTH PROMOTION MODEL

Modifying factors → Cognitive perceptual factors → Health promotion behavior → Output

Demographic variables of mothers
- Age
- Religion
- Education
- Occupation
- Type of Family

Specific variable
- No. of antenatal checkups
- Place of check up
- No. of parity
- Type of delivery
- Number of living children
- No of abortion
- Physical
- Emotional
- Environmental
- Socio-economic

Knowledge attitude and practice of breast feeding of lactating mothers as measured by
- Interview schedule
- Attitude scale
- Observational checklist

Likelihood of engaging in breastfeeding process
- Initiation of breastfeeding within half an hour to one hour
- Mother relaxed and comfortable
- Baby close to the mother
- Puts the baby to both breasts
- Baby’s bottom supported
- Baby roots and reaches the breast
- Follows hygienic measures during breast feeding
- Baby’s mouth wide open
- Lower lip turned out wide
- Directs the nipple into the baby’s mouth, so that most of the areola is in the baby’s mouth
- Both breasts are fed at an interval of 5 to 10 mts
- Holds the baby over the left shoulder and puts him gently on his back (burping)
- Demand feeding
- Exclusive breast feeding

Identification of mothers
- Knowledge
- Attitude & Practice in breast feeding process

Cues to Action

Not included in the present

Nursing Intervention
Identification of learning needs of urban and rural community mothers in the breast feeding process and preparation of course content for an effective inservice education for health personnel of urban and rural communities for the successful management of breast feeding process.
Outline plan for thesis presentation

This chapter has the introduction and background of the study, need for the study, statement of the problem, objectives of the study, assumption of the study operational definitions of the study.