

**EFFECTIVENESS OF COMPUTER AIDED INSTRUCTION  
ON KNOWLEDGE AND EXPRESSED PRACTICE OF  
LACTATION MANAGEMENT AMONG PRIMIMOTHERS**

*By*

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**A DISSERTATION SUBMITTED TO THE TAMILNADU  
Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI IN PARTIAL  
FULFILMENT OF THE REQUIREMENT FOR THE  
DEGREE OF MASTER OF  
SCIENCE IN NURSING**

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**CERTIFICATE**

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Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI IN PARTIAL  
FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF  
MASTER OF SCIENCE IN NURSING APRIL 2011**

## **TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Ethical Committee of Dr. G. Sakunthala College of Nursing has discussed with its members the topic “A pre experimental study to determine the effectiveness of Computer Aided Instruction on knowledge and expressed practice of lactation management among primimothers at selected Maternity Hospitals, Trichy” opted by Mrs. A. SHEELA MARGARET and its implication on study objects for her thesis for M.Sc. Nursing programme and the committee passed clearance for the same topic for her to persue.

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## **ABSTRACT**

### **PROBLEM STATEMENT**

A pre experimental study to assess the effectiveness of computer aided instruction (CAI) on knowledge and expressed practice of lactation management among primi mothers was undertaken by Mrs. A.Sheela Margaret in partial fulfillment of the requirement for the degree of master science in Nursing under Dr. M.G.R Medical University, Chennai.

### **OBJECTIVES**

1. To determine the level of knowledge regarding lactation management before and after CAI.
2. To determine the expressed practice on lactation management before and after CAI.
3. To determine the relationship between knowledge and expressed practice on lactation management among primimothers.
4. To determine the association between knowledge on lactation management with selected background variables.
5. To determine the association between expressed practice on lactation management with selected background variables.
6. Conceptual Frame Work : Rosen Stoch's Health Belief Model.

Research Design : Pre experimental design

O1 x O2

Population / Sample : Primimothers.

Sample Size : 30 Primimothers.

Sampling : Non probability convenience sampling.  
Setting : Jagatha Maternity Hospital, Trichy.  
Tool : Knowledge and expressed questionnaire.

#### Data Collection

Pretest was given for 30 minutes to each primimothers and CAI was given to participants for 45 minutes. The investigator had completed 2-3 samples daily and after delivery posttest was conducted to assess the knowledge and expressed practice.

#### Data Analysis

Descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (paired 't' test and chi square test) was used to test the research hypothesis.

#### Major Finding

The mean post test level of knowledge is higher than mean pre test level of knowledge.

The mean post test level of expressed practice higher than mean pre test level of expressed practice.

There is a significant positive correlation between knowledge and expressed practice of primimothers regarding lactation management in post test.

Significant association found between the background variable family income and the post test level of knowledge.

Significant association found between the background variable age and the post test level of expressed practice .

### Conclusion

The study showed that CAI was effective in increasing the knowledge and expressed practice of primimothers regarding lactation management. There was a positive correlation between the pretest and post test level of knowledge and expressed practice. Though lactation problems are easily preventable and treatable it is an important function of the nurse administrator and the village health nurse to conduct periodic survey among the primimothers and help them to reduce the mortality and morbidity among infants and promoting wellbeing among them.

## CHAPTER- I

### INTRODUCTION

#### BACKGROUND OF THE STUDY

Breast feeding is as old as human kind. Breast milk is accepted as the unique, natural, and nutritious food, provided by nature for the newborn. It is universally acknowledged to be the best and complete food for infants including the sick and preterm babies, as it fulfils specific nutritional needs. Human milk is unequivocally considered as the best food for the neonate due to its physical, biochemical, and immunological qualities.

WHO (1991) defines breastfeeding as “the child has received breast milk (direct from the breast or expressed”).

Lactation is a process which leads to secretion of milk in alveoli of the female breast, its passage along the ducts to the ‘let down reflex’ and its ejection into the mouth of the baby by sucking.

Although lactation starts following delivery, the preparation for effective lactation starts during pregnancy. The physiological basis for lactation is divided into four phases. Preparation of breasts. (Mamogenesis), Synthesis and secretion of milk from the breast alveoli. (Lactogenesis), Ejection of milk (Galactokinesis), Maintenance of lactation (Galactopoiesis)

As the baby begins sucking on the nipple, the let down or milk ejection reflex is stimulated. The hormone oxytocin causes milk to be sent forward from the milk ducts to the nipple.

A healthy mother will produce about 500-800mls of milk a day to feed her infant with about 500 kcal /day. This requires about 600 kcal/day for mother which must be made up from mother's diet or from her body store. For this purpose, a store of about 5 kg of fat during pregnancy is essential to make up any nutritional deficit during lactation. With the exception of iron and calcium, almost all other nutrients are provided in a well balanced diet.

There are usually no contraindications to exercise in moderation during lactation. Breast feeding prior to exercise and wearing supportive bra is recommended. Increased lactic acid production in the milk for about 30-90 minutes following strenuous exercise has led to temporary rejection of milk by some babies and also because of taste alteration of breast milk. -Ruth A wester (2009).

Chandrasekar T.S (2007) assessed the rates of initiation of breast feeding and exclusive breast feeding within six months after delivery in immunization clinic of Pokhara. The rates of initiation within one hour and within 24 hours of delivery were 72.7% and 84.4% respectively. EBF was practiced by 60.2% of the mothers. Colostrums was given as the first feed to 86.2% of babies. The common prelacteal feeds, (6.2%) sugar water, (5.9%) cow's milk and (2.8%) complementary feeds were introduced by 12.7% of the mothers.

Prashant Gangal, (2007) states that the "Breast Crawl" is a wonderful method to initiate breastfeeding. Frequency of feeding and skin-to-skin contact is the key to success. Rooming-in, demand feeding, proper techniques of attachment, positioning and expression of breast



milk coupled with appropriate support to the mother is crucial to establishment of successful lactation.

Breast feeding promotion network of India (2005), made a survey in 49 districts on 9000 breast feeding mothers and found that 39.7% of mothers were exclusively breast fed up to six months, 53.3% of mothers were breast fed up to 3 months and 26.1% of mothers up to 2 months.

A study done by the “Press trust of India” (2004) in Calcutta reported that more than half of the women mistook colostrums as harmful to the babies and only 42% unemployed mothers followed exclusive breast feeding.

A national report of quantitative study regarding infant feeding practices of 98 blocks in 49 districts in India was conducted by Breast feeding promotion network of India (2003)”, the state wise distribution of initiation of exclusive breast feeding was in Andhra Pradesh 20%, Assam 46.5%, Kerala 81.7%, Karnataka 64.7%, Manipur 36.7%, Tamil nadu 62.3%, pondichery 24.5%, and in all over India it is only 28.3%. The state wise distribution of exclusive breast feeding in Andhra Pradesh 69.2%, Assam 28.6%, Delhi 11.4%, Kerala 40%, Manipur 89.9%, Tamil nadu 24.7%, Pondichery 24.7%, Karnataka 64.7%, and in over all India exclusive breast feeding was practiced by 39.7% of mothers only.

Breast feeding is an art and skill. It is initiated during pregnancy when the pregnant woman is encouraged to talk, think, and read about it. Nipple assessment and preparation should begin after 28<sup>th</sup> week of gestation. Antenatal preparation and motivation for breast feeding should

begin from 2<sup>nd</sup> trimester i.e. examination of the nipple to look for whether it is normal and protractile. Care of the nipple is necessary to prevent mechanical problems of breast feeding. If retracted it should not be pulled out (nipple rolling-Halfman's exercise), since it causes preterm labour. Inverted nipples may need to wear a nipple cup (a plastic shield) to help nipples become protuberant. Tone & contour of breast will be helped by the use of proper brassieres. Diet should be well balanced with extra proteins, calcium and iron. Mother must be convinced that the ability of breast feed does not depend on the size of the breast. Mother should be told that the adequate milk is secreted from 3<sup>rd</sup> & 4<sup>th</sup> postnatal day to allay their anxiety.

The mother need to be told about the following factors which are influencing breast feeding. The milk producing reflex is influenced by the psychology and confidence of the mothers, and love and affection of the mother for her baby develops psychological bondage. Early and frequent breast feeding stimulates the production and ejection reflexes. Feeding habits and technique are important to improve close contact, positioning comfort and regulate the demand for feeding. Social factors and false belief of people about colostrums were not good, it delays the first suckling of the baby. Improper diet and ill health of the mother during early lactation and faulty sucking cause inadequate stimulation. So adequate support, guidance and encouragement from family members and health care professionals are associated with enhanced milk production.

For the maintenance of effective lactation, the mother should be counselled regarding the advantages of nursing the baby with breast milk and to take care of any breast abnormality specially a retracted

nipple and to maintain adequate breast hygiene specially in the last two weeks of pregnancy.

Advantages of breast feeding to infants, mothers, families and society are such as nutritional, immunological, developmental, psychological, social, economic and environmental benefits. Literature shows that in India, IMR can be reduced by achieving 90% target of exclusive breast feeding in the first six months of life.

Economically, breast feeding can be a major source of saving community funds. In the US alone, it has been estimated that if the US breastfeeding goals for 2010 can be realized, it has been estimated that 3.6 billion dollars will be saved. (Audrey. J, Naylor, et al (2009)

Ip S, Chung M., et al., (2007) provides strong evidence that human milk feeding decreases the incidence and/ or severity of diarrhoea (64%) , lower respiratory tract infection (72%), otitis media (50%), bacteraemia, bacterial meningitis, botulism, urinary tract infection, and necrotizing enterocolitis , sudden infant death syndrome (36%), insulin- dependent diabetes mellitus (27%) , crohn's disease, ulcerative colitis, lymphoma and leukaemia(19%), allergic and other chronic digestive diseases. It has also helped to reduce mortality and morbidity rate of neonates worldwide.

The above mentioned studies mention health benefits of breast feeding for mothers also. It is documented that breast feeding increases level of oxytocin, resulting in less postpartum bleeding and more rapid uterine involution. Lactation amenorrhea causes less menstrual blood loss over the months after delivery.

Other advantages of breast feeding for the lactating women are earlier returning to pre pregnant weight, delayed resumption of ovulation with increased child spacing, improved bone mineralization, postpartum with reduction in hip fractures in the postmenopausal period, reduction of hip circumference and reduced risk of ovarian cancer, endometrial cancer, and premenopausal breast cancer. Breast feeding has also been reported to decrease the risk of serious postpartum depression and maternally caused child abuse and neglect.

On August 4, (2004) Tamilnadu forces were deeply concerned over the statement made by local administration Minister M.K.Stalin regarding the need for creche to women workers.

Health professionals should follow “10 steps to successful breast feeding” developed by UNICEF and WHO (1991) in hospitals and community settings. Health professionals should give current, accurate, and non-judgemental breast feeding information to enhance successful breast feeding.

Based on systematic review of controlled clinical trial available in Conchrane review, evidence suggests that duration and exclusivity of breast feeding are increased by help with positioning, demand feeding and postnatal support. Thus, it is the responsibility of all health professionals to encourage and support the mother for maintaining lactation.

TNAI emphasized on training in correct breast feeding practices which include the re-establishment of a breast feeding culture. Common problems of breast feeding were early breast engorgement, flat nipples,

faulty suckling techniques, sore nipples etc. These problems must be effectively managed by proper attachment of baby at breast, following antenatal preparation guidelines and hygienic measures, frequent sucking at breast, etc.,

Audrey. J, Naylor, et al., (2009) prepared Lactation Management self study modules by Wellstart international. It has considerable experience in developing a number of useful teaching techniques and tools for mothers, fathers and families. It consists of 3 modules which deals with basics of breast feeding, effective management and prevention of breast feeding problems.

Although breast feeding is natural and physiological, it needs to be protected, supported and it is necessary to have a sound knowledge about lactation management for mothers during antenatal and postnatal period.

Thus, the role of health care system is to give consistent, evidence based advice and support to help mothers effectively initiate and continue breast feeding. Breast feeding counselling to the mothers of hospitalised neonates has a positive impact on achieving exclusive breast feeding. Health team can promote breast feeding by helping the mother and neonate with latching, positioning, managing different lactation problems, counselling and addressing other concerns of mother and the family in the first few weeks after delivery. Health professionals caring for mothers and neonates should provide information based on evidence and good practice.

## SIGNIFICANCE AND NEED FOR THE STUDY

Breast milk is a natural food for infant, as it contains a combination of over 200 active constituents including immune protective agents, enzymes, hormones, fats, proteins, carbohydrates, vitamins, growth and other factors as well as essential nutrients in perfect balance for the growth and development of human infants. It also increases its chance of survival by protecting against various chronic and infective diseases and it provides economic benefits especially in developing countries where more than one third of population lives below poverty line.

Human milk is specific to the human species, a dynamic and complex biological fluid and there is a change in its composition during a feed, from feed to feed during the day and over time as the growing infant's need change. Breast milk changes in appearance over time.

Mullany, Luke C. (2008) conducted a study in the initiation of breast-feeding within 1 hour after birth, has been associated with reduced neonatal mortality in a rural Ghanaian population. Approximately 7.7 and 19.1% of all neonatal deaths may be avoided with universal initiation of breast-feeding within the first day or hour of life, respectively. Community- based breast-feeding promotion programs should remain a priority, with renewed emphasis on early initiation in addition to exclusiveness and duration of breast-feeding.

Breastfeeding helps to ensure the neonate's successful transition from intra-uterine to extra-uterine life. The relationship between breastfeeding and psychosocial development has received a great deal of attention.

BBC NEWS (2008) 6<sup>th</sup> May published as, “Long-term, exclusive breastfeeding appears to improve children's cognitive development. More evidence is being put forward that breastfed babies eventually become more intelligent than those who are fed with formula milk”. Canada's McGill University found breastfed babies ended up performing better in IQ tests by the age of six. The study of nearly 14,000 children is the latest in a series of reports to have found such a positive link.

Breast feeding currently saves 6 million lives each year preventing diarrhoea and other acute respiratory infections. A breast fed child is 14 times less likely to die from diarrhoea, four times less likely to die from respiratory disorders and 25 times less likely to die from other infections compared to non- breast fed infants. –Bimal Kanta Nayak (2009).

Stuebe, Alison M. (2010), Duration of Lactation and Maternal Metabolism at 3 Years Postpartum. i.e. Lactation has been associated with reduced risk of type 2 diabetes and the metabolic syndrome in mothers, concluded in this prospective cohort study, (517 participants were participated) and they did not observe a close - response relationship between duration of lactation and metabolic risk at 3 years postpartum.

Kanimozhi VC, et al., (2009) states that breastfeeding for long duration was common in the study population. Lifetime duration of breastfeeding was inversely associated with reduction of breast cancer risk among premenopausal women (p-value of linear trend, 0.02). Health campaign focusing on breastfeeding behaviour by appropriately educating women would contribute to reduce breast cancer burden.

Karen M. Edmond et al., states that (2005) Promotion of early initiation of breastfeeding has the potential to make a major contribution to the achievement of the child survival millennium development goal; 16% of neonatal deaths could be saved, if all infants were breastfed from day 1 and 22% if breastfeeding started within the first hour. Breastfeeding promotion programmes should emphasise early initiation as well as exclusive breastfeeding. This has particular relevance for sub-Saharan Africa, where neonatal and infant mortality rates are high but most women already exclusively or predominantly breastfeed their infants.

Michaelsen, Kim Fleischel et al., (2003), Meta analysis done on breast-feeding and brain development and a positive effect was found in two different samples of young adults using two different intelligence quotient tests.

Cultural influences may dictate decisions about how a mother feeds her infant. Many women believe that breast feeding is an important part of motherhood. Muslim women often breastfeed for the first two years. Some immigrants from countries where breastfeeding is the norm, may breastfeed for shorter duration or not at all because they lack the support system they had in their own country. (Riordon, 1993).

A mother's personal belief, way of being and view of herself in the world are central components of breast feeding success during maternal period. Supportive partner, encouraging family members and friends enabled them to continue breast feeding during employment. Health professionals made an important contribution to the promotion of breast feeding through encouragement and role modelling. Little or poor



knowledge of mothers regarding physiology of lactation and breast feeding, affects the success of breast feeding to a greater extent.

Although the mother's body produces enough milk as a normal part of the reproductive cycle, the technique of breastfeeding is a learned skill enhanced by practice and support, when the patient needs helpful information prenatally to know what to expect, the opportunity postpartum to practice attaching the baby to the breast and assessing the baby's breast feeding effectiveness to provide the family with confidence, as they embark on this particular experience of parenthood.

Health professionals play a key role in promotion of breast feeding. Because of poor/little knowledge of mothers, the health team members must help, educate or assist them for maintaining lactation. On the other hand, mothers of hospitalised neonates need regular one-to one support from hospital staff. If mothers have not been supported and shown how to breast feed properly, they will have a fear that their breast milk supply is inadequate. Lack of confidence in their skill, neglects the maintenance of lactation and the mothers are unable to breast feed their neonate. Reasons documented for terminating breast feeding are insufficient milk, anxiety, lack of motivation, stress, and inconvenience, interference with work or studies and tiredness.

Investigator during her experience observed, that most of the mothers were not having adequate knowledge about lactation management, antenatal preparation and care of breast, not following the proper breast feeding techniques such as holding the baby, hygienic practices, emotional bonding between mother and baby and improper

intake of diet which leads to decreased secretion of breast milk. Some mothers gave sugar water instead of colostrums. Some mothers suffered with sore / flat nipples and breast engorgement.

The individuals, nurses and administrators need to be aware of the importance of breast feeding. Nurses play a major role in teaching women about the benefits of breast feeding anticipatory guidance for problems that may occur since mother's milk is the universally acknowledged ideal and complete food for her own baby.

Hence, the investigator got interested in selecting this experimental study to evaluate the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers.

## STATEMENT OF THE PROBLEM

The pre experimental study to assess the effectiveness of computer aided instruction (CAI) on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichy, Tamilnadu during the year 2010-2011.

### Objectives

1. To assess the level of knowledge regarding lactation management before and after CAI.
2. To assess the expressed practice on lactation management before and after CAI.
3. To determine the relationship between knowledge and expressed practice on lactation management among primimothers.
4. To determine the association between knowledge on lactation management with selected background variables.
5. To determine the association between expressed practice on lactation management with selected background variables.

### OPERATIONAL DEFINITIONS

#### Effectiveness

It refers to the result produced by agent or reaction.

In this study, it refers to the extent to which the CAI helps to increase the knowledge of primimothers to promote their better

practices towards lactation management as measured by knowledge and expressed practice questionnaire.

### Computer Aided Instruction (CAI)

It refers to the facilitation of instant access to information with infinite patience, accuracy and it provides opportunity for systematically organized maximum learning for all learners. It provides complete individualizing instruction.

In this study, CAI refers to the use of computer as an aid for preparation of compact disc presentation of images and prerecorded voice recording on physiology of lactation, antenatal and postnatal preparation of pregnant mother for breast feeding regarding nipple and breast hygiene, diet which increases/ decreases lactation, rooming in practice, breast feeding technique and management of different problems associated with lactation such as insufficient milk secretion, breast engorgement, crack nipple /sore nipple and inverted or flat nipple.

### Knowledge

Information acquired through experience or education.

It refers to the fact, information and understanding that the primimother has acquired through her experience and education regarding lactation management as measured by knowledge questionnaire.

### Expressed Practice

The actual application of any method.

In this study, it refers to the practices followed for the management of lactation which was measured by expressed practice questionnaire.

### Lactation management

Lactation management refers to the effective management of different problems that can occur during lactation period.

In this study, it refers to gaining knowledge and improving their practice regarding physiology of lactation, advantages of exclusive breast feeding, antenatal and postnatal preparation of pregnant mother for breast feeding regarding nipple and breast hygiene, diet which increases/ decreases lactation, breast feeding techniques, management of different problems associated with lactation such as breast engorgement, insufficient milk supply, crack nipple /sore nipple and inverted or flat nipple.

### Primimothers

A woman who is pregnant for the first time.

In this study, it refers to the mothers who were pregnant for the first time between 37- 40 weeks of gestation and singleton pregnancy and delivered at selected hospital.

## Research Hypothesis

At  $P < 0.05$  level.

- H1. There will be a significant increase in the level of knowledge on lactation management after CAI administration.
- H2. There will be a significant difference in the level of practices on lactation management after CAI administration.
- H3. There will be a significant relationship between knowledge and expressed practice on lactation management among primimothers.
- H4. There will be a significant relationship between knowledge of primimothers on lactation management with selected background variables.
- H5. There will be a significant relationship between the expressed practices of primimothers on lactation management with selected background variables.

## Assumption

1. Primimothers have little knowledge regarding lactation management.
2. Providing information will improve the knowledge regarding lactation management and enhance learning process.
3. Knowledge of people has a strong influence on the adoption of healthy practice.

4. Primimothers will be cooperative to understand CAI.
5. CAI enables us to reach out the prevention and management of common problems associated with lactation such as breast engorgement, inadequate milk supply, crack nipple /sore nipple and inverted or flat nipple) and also to decrease the infant morbidity and mortality rate.

### Delimitation

The study was delimited to

The mothers who were pregnant for the first time.

The mothers whose gestational age between 37-40 weeks.

The mothers who were not having any complications.

The mothers who did not attended previous teaching programme need related to lactation management.

The mothers who were coming regularly for the antenatal visit and planned to have their delivery at selected hospital.

30 samples only.

Two and a half months.

## CHAPTER-II

### REVIEW OF LITERATURE

Literature review is a critical summary of research on a topic of interest, often prepared to put a research problem in context or as the basis for an implementation project.

- (Polit & Hungler-1999)

The literature review is an essential component of the research process, as it aids the researcher in formulating the research plan. It also helps the researcher to conduct his/ her actual study.

Related literature was reviewed in depth regarding lactation management. For the present study, the report on review of literature is organized under the following headings.

1. Literature related to incidence and benefits of exclusive breast feeding practices.
2. Literature related to initiation and duration of lactation.
3. Literature related to diet during lactation.
4. Literature related to common breast feeding problems and its management
5. Literature related to knowledge, attitude, and practices & effectiveness of teaching programmes on lactation
6. Literature related to assistance from health professionals and government health programmes related to breast feeding.



## 1. LITERATURE RELATED TO INCIDENCE AND BENEFITS OF EXCLUSIVE BREAST FEEDING PRACTICES.

Ahmed AH, Sands LP. (2009) conducted a study to investigate the effect of pre- and post discharge interventions on breastfeeding outcomes and weight gain among preterm infants. Pre- and post discharge interventions were effective in promoting breastfeeding exclusivity, duration, and maternal satisfaction among mothers of preterm infants.

Kanimozhi VC., et al., (2009) states that breastfeeding for long duration was common in the study population. Lifetime duration of breastfeeding was inversely associated with breast cancer risk among premenopausal women (p-value of linear trend, 0.02). No such protective effect was observed in postmenopausal women, among whom a protective effect of parity was suggested.

Chandrasekhar T.S., (2007) assessed the rates of initiation of breast feeding and exclusive breast feeding with in six months after delivery in immunization clinic of Pokhara. The rates of initiation with in one hour and with in 24 hours of delivery were 72.7% and 84.4% respectively. EBF was practiced by 60.2% of the mothers. Colostrums was given as the first feed to 86.2% of babies. The common prelacteal feeds (6.2%) , sugar water (5.9%) and cow's milk (2.8%), Complementary feeds were introduced by 12.7% of the mothers.

Karen M. Edmond., et al., (2005) states that. Promotion of early initiation of breastfeeding has the potential to make a major contribution to the achievement of the child survival millennium development goal; 16% of neonatal deaths could be saved if all infants were breastfed from

day 1 and 22% if breastfeeding started within the first hour. Breastfeeding promotion programs should emphasize early initiation as well as exclusive breastfeeding. This has particular relevance for sub-Saharan Africa, where neonatal and infant mortality rates are high but most women already exclusively or predominantly breastfeed their infants.

Kue young and others (2005) in Canada conducted a study regarding the incidence of type 2 diabetes among breast fed and non breast fed infants and it demonstrates that 68% of non breast feed infants were associated with type 2 diabetes and only 3% of breast fed infants are associated with type 2 diabetes.

Thomos M. Ball and David. M. Bennet (2004) done a study in Maharastra and comments that only 75% of mother initiates breast feeding immediately after birth and among those, 50% infants receive breast milk till six months of age and 25% of infants are receiving breast milk till one year of age.

Lawrence (2004) explains that breast milk offers a variety of immunologic properties that are found exclusively in human milk. Human milk has been shown to be effective in protecting the newborn against respiratory and gastro intestinal infections, otitis media, and numerous allergies.

Amanda. H., (2004) coded vitamin D and breastfed infants. In that, for infants and children, Vitamin D deficiency causes bone – deforming disease (Rickets). Current (AAP) suggest to supplement all breast feed infants with vitamin D, role of nurse is to understand Vitamin dilemma, promote breast feeding, and prevent diseases.

Arch Dis Child., (2003), Conducted a study regarding Breast feeding and respiratory morbidity in infancy: a birth cohort study aimed to examine the relation between the duration of breast feeding and morbidity as a result of respiratory illness and infection in the first year of life and 2602 live born children ascertained through antenatal clinics at the major tertiary obstetric hospital in Perth, Western Australia concluded that predominant breast feeding for at least six months and partial breast feeding for up to one year may reduce the prevalence and subsequent morbidity of respiratory illness and infection in infancy.

## 2. LITERATURE RELATED TO INITIATION AND DURATION OF LACTATION

Prashant Gangal. MD., DCH., (2007) States that The Breast Crawl is a wonderful method to initiate breastfeeding. Proper initiation does not necessarily mean successful establishment of breastfeeding. Frequency of feeding and skin-to-skin contact is the key to success. Rooming-in, demand feeding, proper techniques of attachment, positioning and expression of breast milk coupled with appropriate support to the mother is crucial to establishment of successful lactation.

Abbott laboratories (2006) of USA made a study regarding the prevalence of the initiation and duration of breast feeding to six months after delivery among women who were employed full time, who worked part time, and who were not employed outside the home. The initiation and duration of breast feeding to six months after delivery were 66%. Mothers who were worked part time had significantly higher rate of breast feeding (68.8%) than those who were employed full time(65.5%).

Working full time had a ( $p < 0.05$ ) negative effect on breast feeding. By 6 months after delivery, 26.1% of mothers employed full time, 36.6% of mothers working part time, and 37.3% of non working mothers breast feed their infant. Mothers who were not employed were more than two times as likely to breast feed to 6 months than mothers who worked full time.

M.Sai Sunil Kishore, et al., (2006) conducted in a rural population of the (Haryana) state to study their breastfeeding practices, knowledge regarding usefulness of breastfeeding and factors influencing the breastfeeding practices concluded as EBF/BBF practices and breastfeeding knowledge are suboptimal among the rural North Indian mothers. Breastfeeding counselling with emphasis on correct technique can improve the EBF/BBF rates.

Kronborg. H., et al., (2003) conducted a randomized clinical trial study on the influence of psychological factors on the duration of breast feeding. Results showed duration of breast feeding, a positive association with mother's schooling ( $p = 0.002$ ), intention to breast feed, ( $p = 0.001$ ) previous experience with breast feeding ( $p < 0.001$ ) effect of mother's knowledge and dependence on parity of the child. Conclusion was to help mother's focus on practical knowledge.

Softic.I.et al., (2003) conducted a study on infant's feeding practice in the first six months in Tuzlar Canton. The first six months of infants were observed. Results showed that infant feeding practice in first 6 months was inadequate according to WHO recommendation, exclusive breast feeding for first six months. Breast feeding initiation rate was high

but lack of mothers supports after discharge and many barriers discourage exclusive breast feeding of infants in the first 6 months.

Visness (2003) examined the mothers of rural Minnesota regarding the application of employment with initiation and duration of breast feeding. Women with higher education and those who were not employed were more likely to initiate and maintain a longer duration of breast feeding and those who work full time stop breast feeding before 3 months.

### 3. LITERATURE RELATED TO DIET DURING LACTATION

Rozlyn Mignogna, NTP- Nutritional therapy practitioner, (2010), described the meal Planning with the Diet for Pregnant and Nursing Moms advised to take cod liver oil, milk, butter, fresh sea food/beef/lamb, 2 or more scrambled eggs, salads, 2 table spoon of coconut oil daily used in cooking etc, advice to avoid junk and commercial fried food, sugar, white flour, soft drinks, alcohol, cigarettes, drugs, caffeine products along with iron and calcium supplements.

Mukta Gaikwad (2010) states that a breastfeeding mother requires large quantities of calories to produce milk for her baby and says that drinking oodles of water, is the first rule of breastfeeding diets. Juices, dhal and milk are the recommended fluids. However, avoid caffeine as it may be harmful for your baby. This can be very harmful for the child. The baby may not be able to sleep well, if caffeine is passed on through breast milk. Eating a lot of spinach, corn, cabbage, fenugreek, asparagus, chick peas and beet root will give you the daily dose of iron and folic acids.

Angeline Theeba I., et al (2007) conducted a study as garlic versus dry fish on breast milk secretion revealed that a prim mother with less breast milk secretion can gain in breast milk secretion with garlic intake on the second day of the postnatal period.

Ahalya (2007) carried out case control study on factors related to inadequate breast milk among cases and controls, the mothers without rest and sleep, who did not take nuts, who has stress about labour, with episiotomy wound had risk of inadequate breast milk.

Jania (2006) reports that dry fish has the galactogogues property and the protein content in the dry fish improves the milk secretion. ( $p < 0.05$ )

Olfat A. Darwish and Ezzat K. Amine (2006) conducted a study on food during pregnancy and lactation in Iraq presents the pattern of maternal diet during pregnancy and lactation in the three different study areas. The majority of mothers did not give any particular reason for their avoidance of these food items. Over 25 per cent believed that these foods might produce harmful effects on the foetus, while 19.2 per cent avoided these foods because of abdominal distension and discomfort.

Patty.R., (2005) conducted a study on promoting nutrition in breast feeding women. Healthy people 2010 established two goals. 75% of mothers will breast feed their infants after delivery and 50% of all mothers will increase the duration of breast feeding to 6 months. The diet or food recall method was used. Lactating women should be encouraged to follow dietary guidelines that promote fruits and

vegetables. Whole grain, breads, cereals, calcium and protein rich foods. Nurses should seek every opportunity to select foods to promote well being and successful lactation.

#### 4. LITERATURE RELATED TO COMMON BREAST FEEDING PROBLEMS AND ITS MANAGEMENT

JBI - The Joanna Briggs Institute (2009), recommended about The Management of Nipple Pain and/or Trauma Associated with Breastfeeding such as antenatal and early postnatal education on positioning and attachment technique is recommended in preventing or reducing nipple pain caused by breastfeeding. Warm water compresses are recommended over breast milk for the management of nipple pain and trauma related to breastfeeding. Antenatal nipple preparation may reduce nipple pain but caution is required due to the risk of uterus contraction.

Taveras. EM., et al., (2004) conducted a prospective cohort study on opinions and practices of clinicians associated with continuation of exclusive breast feeding. 288 mothers of low risk mother – newborn were selected. Findings revealed that mothers who discontinued exclusive breast feeding were more likely to have problems, have infant latching on or suckling (or): 3.8; 95% confidence interval (1.1-5.0) clinicians practices regarding formula supplementation of healthy infants and their opinions about importance of breast feeding advice are associated with likelihood that mothers will continue exclusive breast feeding.

Kvist, L. (2004) states the effects of acupuncture and care interventions on the outcome of inflammatory symptoms of the breast in

lactating women suggests that mothers in all groups expressed relative satisfaction with the breastfeeding situation despite considerable discomfort interpreted with care but may suggest that care interventions play a great part in the recovery of these women as acupuncture treatment or the use of oxytocin spray.

A qualitative analysis of breast feeding problems was conducted by Stewart women Knox. B. (2003) in west Bengal. Participants were approached at convenience from the women attending immunization clinic. He indicates that the main barriers to breast feeding are restricted freedom, and independence associated with family issues, return to work, social embarrassment, perceived social isolation, inability to carry out every day activities and social isolation.

Vijiyalakshmi. S. et al., (2000) conducted a non equivalent control group study on breast feeding technique in prevention of nipple sore to primi postnatal mothers were selected. Analysis revealed that the knowledge and skill gained in experimental group and the chi-square test showed a significant association between two groups.

##### 5. LITERATURE RELATED TO KNOWLEDGE, ATTITUDE, AND PRACTICES & EFFECTIVENESS OF TEACHING PROGRAMMES ON LACTATION

Grossman, et al., (2009) concluded as Hospital Education in Lactation Practices – that is Intensive breastfeeding education for health care practitioners can increase breastfeeding initiation rates concluded as Intensive breastfeeding education for health care practitioners can increase breastfeeding initiation rates.



Thurman, Sara Elizabeth, et al., (2009) states that a positive correlation between IBCLC - International Board Certified Lactation Consultant use and breastfeeding duration and promote a longer duration of breastfeeding at postpartum when utilized in primary care settings.

Patricia Joan Martens (2008) conducted a study on does Breastfeeding Education affect nursing staff beliefs, Exclusive Breastfeeding Rates, and Baby-Friendly Hospital Initiative Compliance? The Experience of a Small, Rural Canadian Hospital. Staff surveys and chart audits were conducted at both the intervention and control site hospitals prior to the intervention and 7 months after the intervention. Over a 7-month period, the intervention hospital experienced an increase in BFHI compliance (24.4 vs. 31.9,  $p < 0.01$ ), breastfeeding beliefs (55.0 vs. 58.8,  $p < 0.05$ ), and exclusive breastfeeding rates (31% vs. 54% of breastfed babies,  $p < 0.05$ ) but no change in breastfeeding attitudes (44.0 vs. 44.9,  $p = 0.80$ ). The control site experienced no change in BFHI compliance, beliefs, or attitudes but a significant decrease in exclusive breastfeeding rates (43% vs. 0%,  $p < 0.05$ ).

Malathy.D., et al., (2008) who conducted a descriptive survey carried out in Chennai, among mothers at last trimesters of pregnancy (n=100) concluded that the primigravida mothers attending the child birth preparation classes will have an adequate level of knowledge and favorable attitude towards child birth preparation.

Shu-Shan Lin., et al (2007) conducted a study to design a structured prenatal education programme on breastfeeding and to evaluate the effectiveness of the programme. Satisfaction with the programme

was high. The experimental group had higher scores in breastfeeding knowledge and breastfeeding attitude at three days postpartum. The experimental group showed higher breastfeeding satisfaction at three days and one month postpartum.

Laurie Barclay. M.D., et al (2007), A single antenatal counselling session with educational materials improved breast-feeding practices up to 3 months after delivery and provision of printed or audiovisual educational material is not enough. Health care workers should make every effort to have one face-to-face encounter to discuss breastfeeding with expectant mothers before they deliver."

Dall'Oglio., et al., (2007) who conducted a study to evaluate a breastfeeding promotion programmes in an Italian neonatal intensive care unit (NICU) over a period of time, concluded that the implementation of a breastfeeding promotion program in NICU has a markedly positive effect on exclusive breastfeeding rate early after discharge.

Asia Ratag Presas., (2007) Conducted a Quasi experimental study concluded as the individual counseling on pure breast feeding was an effective intervention in improving the knowledge and practice of pregnant mothers in their last trimesters.

Kelleher CM (2007) who conducted a qualitative, comparative sociological study in 2 postpartum units in Boston clearly outlines the need for educating mothers about breast feeding in the prenatal period and during the first days after delivery. Since the women experienced pain and discomfort during breast feeding.

Evielyn Labbay (2006) did a study on the effect of lecture versus booklet on the knowledge and attitude of mothers regarding breastfeeding in barangay Libertad, Aurora, Zamboanga del Sur. The result in the said study showed that the knowledge significantly increased in both lecture and booklet groups from 11.56 to 16.88 and 12.12 to 15.50 respectively 1 month after intervention. The lecture group was also found out to have significantly higher mean scores compared to the booklet group. Both groups also improved in the attitude but with no significant difference when compared to one another.

Jacarol. C., et al., (2003), have conducted a prospective descriptive study on breast feeding knowledge, breast feeding confidence and infants feeding plans; effect on actual feeding practices. 83 first time mothers were selected. Results showed that breast feeding knowledge was strongly co-related with breast feeding confidence ( $r=0.262$ ;  $p=0.025$ ), & actual lactation duration ( $r=0.455$ ,  $p=0.0001$ ).

Nandhini. S, (2003) conducted a descriptive survey to assess the knowledge, attitude, practice and problems of postnatal mothers regarding breast feeding. 100 post natal mothers were selected who had normal deliveries. Findings revealed that knowledge and attitudes about breast feeding among postnatal mothers reflect the beliefs and practices prevalent among the women in the community.

Geracittie Veena Maria (2000) conducted an experimental study on the effectiveness of STP on breast feeding among selected primi postnatal mothers (30) and concluded that STP was effective. ( $p<0.001$ )

Nam Mi Kang (1999) who conducted a study on knowledge, attitude and practice regarding breast feeding among primiparous couples, revealed the relationship between practice of breast feeding and mother's knowledge ( $p= 0.031$ ) and mother's attitude ( $p=0.015$ ).

Veronica Valdes., et al.,(1995) who conducted a experimental study on the effects on professional practices of a 3 day course on breast feeding assessed and reported changes in clinical breast feeding support practices (69%) following a 3 day course.

#### 6. LITERATURE RELATED TO ASSISTANCE FROM HEALTH PROFESSIONALS AND GOVERNMENT HEALTH PROGRAMMES RELATED TO BREAST FEEDING

Kervin BE., et al., (2010) conducted a cross sectional study ( $n=164$ ) states that the breast feeding outcomes to be improved and need to strengthen the professional support strategies since it is directly related to the better breast feeding behaviors.

Dyson L, Renfrew .MJ., et al., (2009), concluded that the need for national policy directives was clearly identified as a priority to address many of the barriers experienced by practitioners when trying to work across sectors, organisations and professional groups. Routine implementation of the WHO/UNICEF Baby Friendly Initiative across hospital and community services was recommended as core to breast-feeding promotion in the UK. A local mix of complementary interventions is also required.

Ogbuanu CA, et al., (2009) conducted a study and the findings suggest the need for targeting breastfeeding interventions to different subgroups of women. In addition, there are implications for policy particularly regarding breastfeeding support in hospitals.

Audrey J. Naylor, MD, et al (2009) Prepared by Wellstart International on Lactation Management as Self-Study Modules for mothers, fathers and families, It has considerable experience in developing a number of useful teaching techniques and tools. Module 1 deals with each woman brings her own frame of reference to the pregnancy and motherhood experience. Module 2: It deals with basics of Breastfeeding. Module 3: It deals with most breastfeeding problems and its prevention.

Stevens, Bonnie et al., (2006) compared the incremental costs associated with the provision of home-based vs. hospital-based support for breastfeeding by nurse lactation consultants for term and near-term neonates during the first week of life concluded as the cost of home lactation support programmes were comparable with the costs of hospital-based standard care. Breastfeeding support at home by lactation consultants should be considered as an option as it was no more costly than support from lactation consultants in the hospital setting.

## CONCLUSION

Thus this chapter dealt with the review of literature related to incidence and benefits of exclusive breast feeding practices, initiation and duration of lactation, diet during lactation, common breast feeding problems and its management, knowledge, attitude, and practices & effectiveness of teaching programmes on lactation and assistance from health professionals and government health programmes related to breast feeding.

## CONCEPTUAL FRAMEWORK

Conceptual framework for study is developed from the existing theory and helps in defining the concepts of interest and proposing relationship among them. The model gives direction for the planning, data collection and interpretation of findings

- (Burns and Groove, 1995).

The present study aims at determining the effectiveness of Computer Aided Instruction (CAI) on knowledge and expressed practice of primimothers regarding lactation management. The conceptual framework of the present study was developed based on Rosenstock's and Becker's health belief model.

Good health is an objective common to all people

- Rosenstock (1974).

### Individual perception

In this study, the individual perceptions are the deficient knowledge and practices of the mothers regarding lactation management such as physiology of lactation, advantages of exclusive breast feeding, antenatal and postnatal preparation for lactation, factors which influence and decrease lactation, breast feeding techniques and management of minor discomforts occurs during lactation.

### Perceived threats

In this study, perceived threat is the deficiency in the mother's knowledge and practices which will hinder the performance in lactation management leading to lactation failure.

## Modifying factors

Factors that modify a person's perception include the following

### Background Variables

In this study, the background variables that have influence over the mother's knowledge and expressed practice on lactation management include the age of the mother, education and occupation of the mother, family income, religion, residence and birth order of the mother.

### Cues to Action

Cues to action can be either internal or external. In this study, the internal cues include the feeling of mother or thoughts about the ability to cope with pregnancy and breast feeding. The external cue is the investigator's Computer Assisted Instruction on lactation management.

### Likelihood of Action

The likelihood of a person taking recommended preventive health action depends on the perceived benefits of the action.

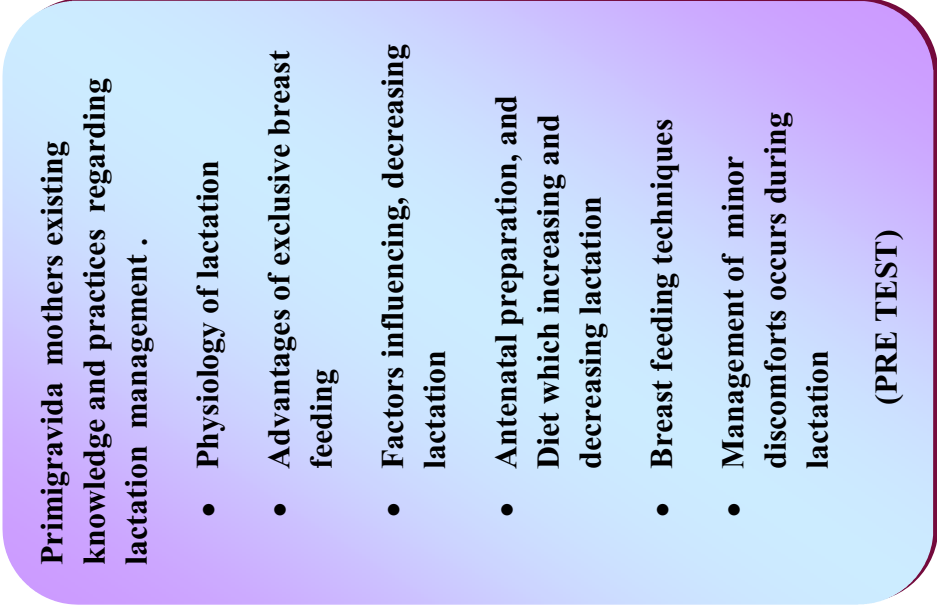
The perceived benefits of action – in this study the perceived benefits of action is the satisfactory knowledge and expressed practice on lactation management like physiology of lactation, advantages of exclusive breast feeding , antenatal and postnatal preparation for lactation, factors which influence and decrease lactation, breast feeding techniques and management of minor discomforts which occurs during lactation.



Likelihood of taking recommended preventive health action is the improvement in the knowledge and expressed practice of mothers on lactation management.

The model Rosen Stock's and Becker's, Health belief model, is best suited for this study which was undertaken to determine the knowledge and expressed practice of mothers regarding lactation management, using pre-test and post-test method.

**INDIVIDUAL PERCEPTION**



**MODIFYING FACTORS**



**LIKELIHOOD OF ACTION**

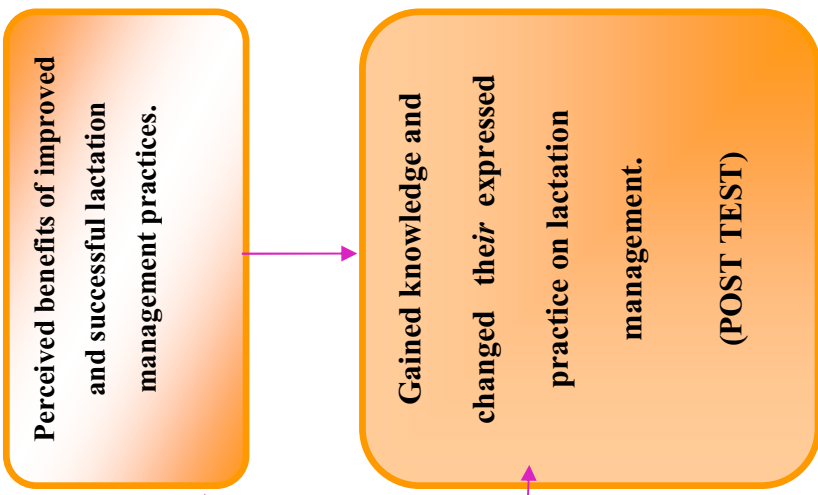


Figure -1. CONCEPTUAL FRAMEWORK - ROSENSTOCK'S AND BECKER'S HEALTH BELIEF MODEL

## CHAPTER – III

### Research methodology

Methodology for research refers to investigations of the ways of obtaining, organizing, and analyzing data. Methodology studies address the development, validation and evaluation of research tools and methods.

- (Polit-2004)

It dealt with the research methodology adopted for the study. It has research approach, research design, setting, population, sampling technique, research tool data gathering process and plan for data analysis.

### Research Approach

Research approach indicates the basic procedure for conducting the study. The selection of approach depends upon the purpose of the study. The present study aimed at determining the effectiveness of CAI, physiology of lactation, advantages of exclusive breast feeding, antenatal and postnatal preparation for lactation, factors which influence and decrease lactation, breast feeding techniques and management of minor discomforts occurs during lactation. In order to achieve the objectives, an evaluative approach was found to be appropriate.

### Research design

Research design is the overall plan for addressing a research question, including specifications for enhancing, the integrity of the study. - (Polit-1999)

The investigator selected a pre experimental design, one group pretest and post test design for this study.

O1 X O2

#### Key

- O1 = Pretest  
X = CAI administration  
O2 = Post test.

#### Setting of the study

The study conducted at Jegadha Maternity Hospital, Trichy, which is situated away from the college about 2 kms.. This is a 50 bedded maternity hospital. This unit comprises of one antenatal ward, one post natal ward, one labour room, one post operative ward and an operation theatre.

The antenatal outpatient department remains opened on all days from 8.00am to 1.00pm except Sundays. On an average, 10-20 primimothers attending the clinic per day and 50-60 primimothers deliver normally with episiotomy per month. The investigator selected this for availability of subjects and feasibility of conducting the study.

#### Population

The target population of this study was the primimothers attending antenatal OPD.

### Sample

The sample taken for the study was antenatal mothers who were attending antenatal OPD at Jegadha hospital, Trichy.

### Sample Size

The size of the sample were 30 primimothers who were at 3<sup>rd</sup> trimester between 37-40 weeks of gestation.

### Sampling technique

Convenience sampling entails using the most conveniently available people as study participants.

-(Polit-2004)

Non probability convenience sampling technique used for this study.

### Criteria for sample selection

#### Inclusion criteria

1. Primimothers of 16-35 years.
2. Primimothers gestational age between 37-40 weeks.
3. Primimothers who speak Tamil and English.
4. Primimothers who attend antenatal OP regularly and planed to have delivery at Jegadha Hospital, Trichy.
5. Primimothers who are willing to participate in this study.

6. Primimothers who did not attend previous teaching programme related to lactation management.

#### Exclusion criteria

1. Primimothers with any high risk.
2. Primimothers with less than 36 weeks and more than 40 weeks.

#### Research tool & technique

The tool used for the research study was self administered knowledge and expressed practice questionnaire.

#### Description of the tool

The tool consists of 3 parts,

PART – I : The first part of the tool will be demographic data which includes age, educational status and occupation of the mother, income of the family, religion, residence and birth order of mother among girl children in her family.

PART – II : The second part of the tool consists of 25 knowledge questions which includes meaning, physiology of milk production, advantages of exclusive breast feeding, preparation and initiation of lactation, dietary calorie requirement, breast feeding techniques, common problems and its management.

PART – III : The 3<sup>rd</sup> part of the tool consists of 20 items based on expressed practice.

#### Scoring procedure

Part – I : The total score of multiple choice items on knowledge regarding lactation management were 25. Each item was given “1” mark for correct answer and “0” mark for the wrong answer.

The result score was ranged as follows

Level of knowledge	Score
Adequate	76- 100%
Moderately adequate	51-75%
Inadequate	0-50%

Part – II : Regarding questions on expressed practice, it consisted of 20 items on rating scale always, occasional, and never. The positive to negative responses were scored from 2 to 0. That is “0 for Never, 1 for Occasional and 2 for Always”.. The score was ranged as follows.

The score range is as follows as the level of practice.

Level of practice	Score
Good practice	76- 100%
Satisfactory practice	51-75%
Poor practice	0-50%

### Computer Aided Instruction

In this study, CAI was given for the group of study subjects and it was played for 45 minutes. After CAI, mothers were given time to ask doubts.

In this study, CAI refers to the use of computer as an aid for preparation of compact disc presentation of images and prerecorded voice recording on anatomy of breast, physiology of lactation, antenatal and postnatal preparation of pregnant mother for breast feeding regarding nipple and breast hygiene, diet which increases / decreases lactation, rooming in practice, breast feeding technique and management of different problems associated with lactation such as breast engorgement, insufficient milk supply, crack nipple / sore nipple and inverted or flat nipple.

### Testing of the Tool

#### Validity

For content validity, the research tools were submitted to experts who were requested to give their valuable opinion about the context areas and the relevance, clarity and appropriateness of the items. The experts included were five nursing experts specialized in Maternity Nursing and one doctor specialized in Obstetric and Gynecology and two statisticians specialized in Statistics. The questionnaire developed by the investigator was based upon the review of literature and the experts suggestions. They suggested not to include negative statement question type.



## Reliability

Reliability of the tool (split half technique) for knowledge is 0.78 and for expressed practice is 0.82.

## Pilot Study

In order to list the feasibility and practicability, a pilot study was conducted after obtaining permission from the authority concerned and started from 15.06.2010 to 06.07.2010 in selected hospital, Trichy. A total of 5 primimothers with the gestational age between 37- 40 weeks were selected and conducted the pre test was conducted regarding knowledge and expressed practice on lactation management. Then, CAI was administered for 45 minutes and their doubts were cleared. After delivery, post test was conducted. These 5 mothers were not included in the main study. The data collected were tabulated and analyzed using descriptive and inferential statistics. The data were enumerable to statistical analysis and then the study was found to be feasible.

## Data gathering Process

The investigator obtained approval from the dissertation committee and permission from departmental head of Dr. G.Sakunthala College of Nursing, Trichy. Both verbal & informed written consent obtained from each subject and data kept confidential. The data collection period was from 07.07.10 to 15.09.10. Before conducting the study, the formal permission was obtained. The investigator introduced herself and identified the sample. After informing the purpose of the study to the sample, they were selected by non probability convenience sampling technique and pre experimental one group pre test and post test design was used. Pre test questionnaire was given to them and collected after its

completion. Investigator was with them at the time of administration of the questionnaire. The pre test was conducted by using self administered questionnaire to 2 to 3 samples of primimothers per day for 30 minutes per client. Computer Aided Instruction was given to participants for 45 minutes after that their doubts were clarified. After delivery i.e. postnatally post test was conducted to assess the knowledge and expressed practices of mothers regarding lactation management.

#### Plan for data analysis

The data would be analyzed using descriptive and inferential statistics based on the objectives. The following plan of data analysis were developed.

Percentage mean, Frequency, and Standard deviation would be analyzed background data.

Paired t- test would be used to find out the effectiveness of CAI.

Correlation coefficient would be used to find out the relationship among knowledge and expressed practice of lactation management.

The Chi-square would be used to find out the association among knowledge and expressed practice of lactation management with selected background variables.

### Ethical Considerations

The study conducted after the approval of the dissertation committee of Dr.G. Sakunthala College of Nursing, Trichy. A written permission was obtained from the concerned authority of the selected hospital. The purpose and the nature of study were explained to each subject and the subject's consent was obtained. Patients were also informed that they can withdraw themselves from the study whenever they feel difficulty or any inconvenience and assurance was given to the subjects regarding the confidentiality of the data collection.

## CHAPTER IV

### ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the description of the sample, analysis and interpretation of data to evaluate the effectiveness of Computer Aided Instruction (CAI) on lactation management. The obtained data have been classified, grouped and analyzed statistically based on the objectives of the study.

#### OBJECTIVES OF THE STUDY

1. To assess the level of knowledge regarding lactation management before and after CAI.
2. To assess the expressed practice on lactation management before and after CAI.
3. To determine the relationship between knowledge and expressed practice on lactation management among primimothers.
4. To determine the association between knowledge on lactation management with selected background variables.
5. To determine the association between expressed practice on lactation management with selected background variables.

#### ORGANIZATION OF THE FINDINGS

The analysis of the data has been organized and presented under the following headings:

- Section – I : Frequency and percentage distribution of sample according to background characteristics.
- Section – II : Percentage distribution of knowledge and expressed practice scores on lactation management before and after administering CAI.
- Section – III: Comparison of mean scores between pretest and posttest.
- Section – IV: Correlation between knowledge and expressed practices scores of post test.
- Section – IV: Association between selected background variables and posttest knowledge and expressed practices scores of primimothers on lactation management.

Association between background variables and post test expressed practice of primimothers on lactation management.

## SECTION-I

This section deals with frequency and percentage distribution of background variables.

*Table-1*

FREQUENCY DISTRIBUTION AND PERCENTAGE OF SAMPLES  
ACCORDING TO THEIR BACKGROUND VARIABLES: N=30

S.No.	Demographic Variables	f	%
1.	Age of the mother (years)		
	a) 16 – 20	15	50
	b) 21 – 25	08	28
	c) 26 – 30	05	17
	d) > 30	02	07
2.	Education of mother		
	a) Illiterate	02	08
	b) Primary School	03	10
	c) Higher Secondary	12	40
	d) Degree	13	43

(Contd...)

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3.	Occupation of mother		
	a) House wife	23	77
	b) Coolie	0	0
	c) Private Concern	03	10
	d) Government employed	04	13
4.	Income of the family ( ₹ )		
	a) 1,500 - 3,000	09	30
	b) 3,001 – 5,000	0	0
	c) 5,001 – 10,000	15	50
	d) > 10,000	06	20
5.	Religion		
	a) Hindu	22	73
	b) Christian	06	10
	c) Muslim	05	17
	d) Others	0	0
6.	Residence		
	a) Rural	08	28
	b) Urban	22	73
7.	Birth order of mother among girl children		
	a) First born	20	6.7
	b) Second born	05	17
	c) Third born	05	17
	b) Fourth and above	0	0

---

The above table 1 shows the frequency distribution of background variables of primimothers.

The following inferences could be made are

The majority of the population belongs to the age group of 16-20 years were 15 (50), 21-25 years 8 (28), 26-30 years 5 (17) and > 30 years were 2 (7).

The educational level of mothers shows that 13 (43) were graduates, 12 (40) of them finished higher secondary, 3(10) were finished primary school and 2 (8) were illiterates.

The occupation of her shows that 23 (77) were house wives, 4(13) and 3(10) of them employed in government and private concern respectively.

Family income shows that 15 (50) were earning Rs.5000- 10,000, 9 (30) earning about Rs. 1500 - 3000, 6 (20) were earning > Rs.10000 per month.

Religion shows that majority of them 22 (73) were Hindus, 6 (17) of them were Muslims, and 5 (10) of them were Christians.

Regarding residence 22 (73) of them were from urban areas and 8 (28) of them were from rural areas.

In regard to birth order among girl children in her family were first born 20 (67), second born were 5 (17) and third born were 5(16).

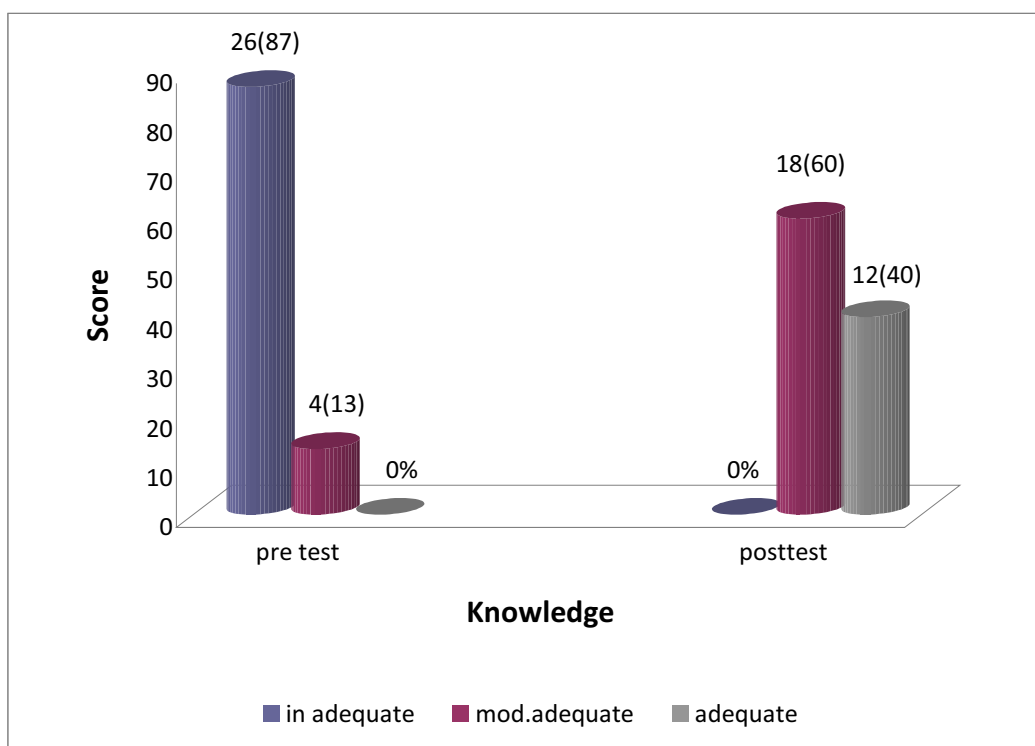


## SECTION-II

This section deals with the knowledge and expressed practice scores before and after CAI administration.

*Figure-2*

Percentage distribution of knowledge scores of primimothers on lactation management before and after CAI.

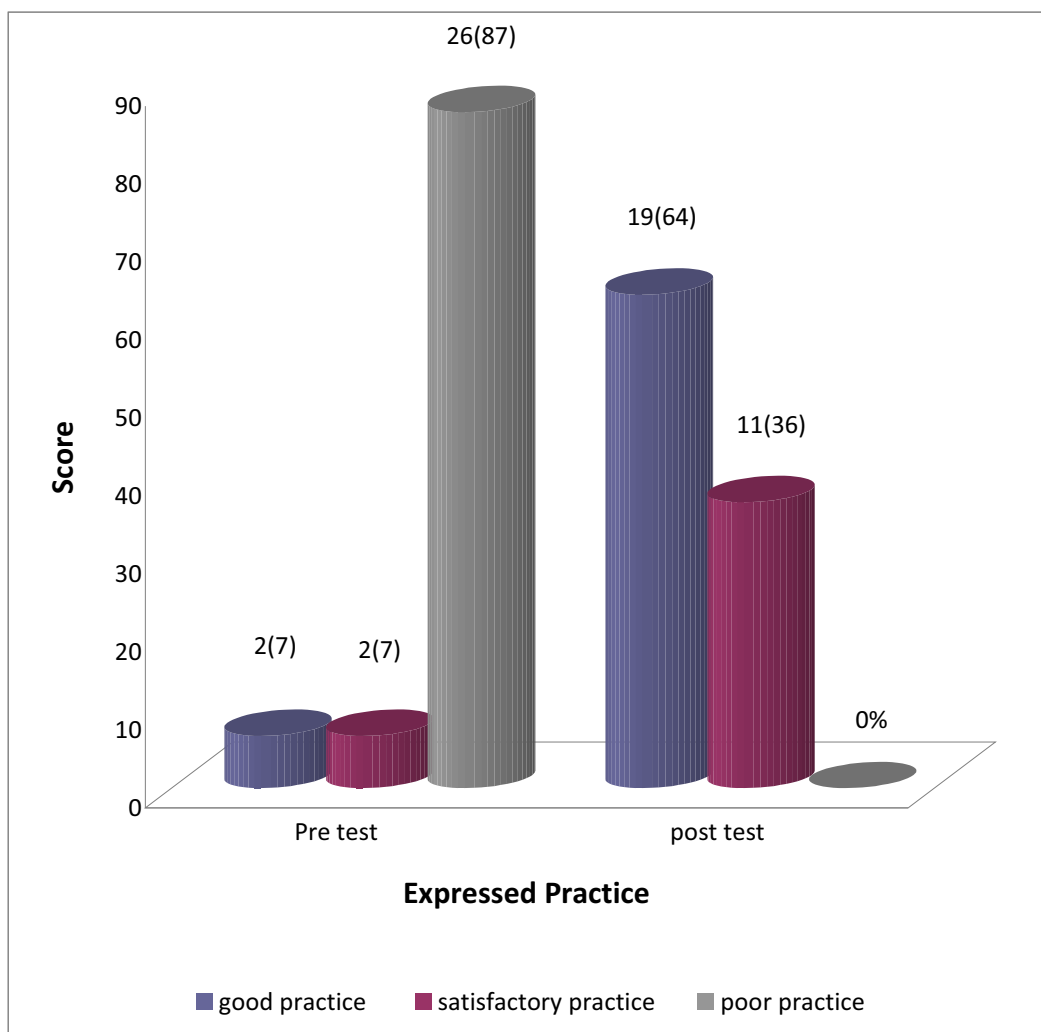


The following inference could be made are

The distribution of knowledge scores of primimothers on lactation management before and after CAI shows, in the pre test 26 (87) of them had acquired inadequate knowledge and 4 (13) of them had acquired moderately adequate knowledge. In the post test 18 (60) of them had acquired moderately adequate knowledge and 12 (40) of them had acquired adequate knowledge.

*Figure-3*

Distribution of expressed practice scores of primimothers on lactation management before and after CAI.



The following inferences made are

The distribution of expressed practice scores of primimother on lactation management before and after CAI shows, in the pre test 26 (87) of them had poor practice scores, 2 (7) of them had satisfactory practice scores and 2 (7) of them had good practice scores. In the post test 19 (64) of them had good practice scores and 11 (36) had satisfactory practice scores.

## SECTION – III

This section deals the comparison of scores between pre-test and post-test on knowledge & expressed practice before and after CAI administration.

*Table-2*

Comparison of mean scores between pretest and posttest on knowledge & expressed practice of primigravida mothers on lactation management before & after CAI administration.

Components	Pretest Mean	Posttest Mean	Mean Difference	Standard Deviation	Paired 't' test
Knowledge	42.93	72.62	29.74	12.94	12.58*
Expressed Practice	47.08	82.57	35.49	15.29	12.70*

\*Significant at  $p < 0.05$

The mean posttest knowledge (72.62) was higher than the mean pretest knowledge (42.93) with the standard deviation (12.94) and the obtained 't' value ( $t = 12.58$ ) was significant at  $p < 0.05$ .

The mean posttest expressed practice (82.57) was higher than the mean pretest expressed practice (47.08) with the standard deviation (15.29) and the obtained 't' value ( $t = 12.703$ ) was significant at  $p < 0.05$ . So the corresponding hypothesis 1&2 (H1), (H2) were accepted.

## SECTION-IV

This section deals with correlation between knowledge & expressed practice scores of post test.

*Table-3*

Correlation between posttest knowledge & expressed practice of primimothers on lactation management after CAI administration.

Items	Mean Scores	Standard Deviation	r
Knowledge	72.67	12.945	0.840**
Expressed Practice	82.57	15.299	

\*\* Significant at  $p < 0.01$

There was a significant positive correlation ( $r = 0.84$ ) between the post test level of knowledge (mean = 72.67, standard deviation = 12.94) and post test level of expressed practice (mean = 82.57, standard deviation = 15.29) significant at  $p < 0.01$ . So the hypothesis 3 (H3) accepted.

## SECTION-V

This section deals with the association between the selected background variables of sample and the post test knowledge and expressed practice scores of primimothers on lactation management.

*Table-4*

Association between background variables and posttest knowledge of primimothers on lactation management.

N = 30

S. No	Background variables	Moderately Adequate	Adequate	$\chi^2$
1.	Age of the mother (years)			
	a) 16 – 20	5	10	6.258
	b) 21 – 25	6	2	
	c) 26 – 30	1	4	
	d) > 30	0	2	
2.	Education of mother			
	a) Illiterate	2	1	1.018
	b) Primary School	1	2	
	c) Higher Secondary	4	7	
	d) Degree	5	8	

(contd...)

3.	Occupation of mother			
	a) House wife	11	13	2.396
	b) Coolie	0	0	
	c) Private Concern	1	2	
	d) Government employed	0	3	
4.	Income of the family ( ₹ )			
	a) 1,500 - 3,000	7	2	7.963**
	b) 3,001 – 5,000	0	0	
	c) 5,001 – 10,000	3	12	
	d) > 10,000	2	4	
5.	Religion			
	a) Hindu	10	12	2.273
	b) Christian	0	3	
	c) Muslim	2	3	
	d) Others	0	0	
6.	Residence			
	a) Rural	5	3	2.301
	b) Urban	7	15	

(Contd...)

7.	Birth order of mother among girl children			
	a) First born	9	11	1.042
	b) Second born	1	4	
	c) Third born	2	3	
	b) Fourth and above	0	0	

\*\*Significant at  $p < 0.01$

Table – 4 showed that there was a significant association between the selected background variable family income ( $\chi^2 = 7.963$ ;  $df = 2$ ;  $p < 0.01$ ) and the post test level of knowledge at  $p < 0.01$  level. There was no significant association found between the post test level of knowledge and selected back ground variables of mothers such as age, education, occupation, religion, residence and birth order among girl children in her family.

Table-5

This section deals with the association between the selected background variables of sample and the post test expressed practice.

Association between background variables and posttest expressed practice of primimothers on lactation management.

S. No	Background variables	Moderately Adequate	Adequate	$\chi^2$
1.	Age of the mother (years)			
	a) 16 – 20	4	11	7.464*
	b) 21 – 25	6	2	
	c) 26 – 30	1	4	
	d) > 30	0	2	
2.	Education of mother			
	a) Illiterate	1	2	0.047
	b) Primary School	1	2	
	c) Higher Secondary	4	7	
	d) Degree	5	8	
3.	Occupation of mother			
	a) House wife	10	14	2.010
	b) Coolie	0	0	
	c) Private Concern	1	2	



	d) Government employed	0	3	
4.	Income of the family ( ₹ )			
	a) 1,500 - 3,000	6	3	5.311
	b) 3,001 – 5,000	0	0	
	c) 5,001 – 10,000	3	12	
	d) > 10,000	2	4	
5.	Religion			
	a) Hindu	9	13	1.931
	b) Christian	0	3	
	c) Muslim	2	3	
	d) Others	0	0	
6.	Residence			
	a) Rural	4	4	
	b) Urban	7	15	
7.	Birth order of mother among girl children			
	a) First born	8	12	0.718
	b) Second born	1	4	
	c) Third born	2	3	
	b) Fourth and above	0	0	

\* Significant at  $p < 0.05$

Table-5 shows that there was significant association between the selected demographic variable age of mother ( $\chi^2 = 7.464$ ;  $df = 3$ ,  $p$  at 0.05 level). There was no significant association found between the post test level of knowledge and selected back ground variables of mothers such as education, occupation, family income, religion, residence and birth order among girl children in her family.

## CHAPTER – V

This chapter deals with the discussion of the study findings.

The study was done to determine the effectiveness of Computer Aided Instruction on lactation management among primimothers.

A pre-experimental design was used to conduct the study. Knowledge and expressed practice were assessed by self administered knowledge and expressed practice questionnaire and non-probability convenience sampling technique. The study sample consisted of 30 primimothers between 16-35yrs of age with 37-40 weeks gestational age. Using the above tool, data were collected and analyzed and the study findings revealed the following,

According to table-1, background variables of the primimothers, majority of them 15 (50) were between 16-20 years, their educational level showed 13(43) were graduates, 23(77) were house wives, their family income showed that 15(50) were earning Rs.5000- 10,000/ month. Religion shows that majority of them 22(73) were Hindus, 22 (73) of them were from urban areas. In regard to birth order among girl children in her family, majority of them were first born 20 (67).

These finding were supported by Visness (2003) examined the mothers of rural Minnesota regarding the application of employment with initiation and duration of breast feeding. Women with higher education and those who were not employed, were more likely to initiate and maintain a longer duration of breast feeding and those who worked full time stopped breast feeding before 3 months.

The first objective of the study was to assess the level of knowledge regarding lactation management of primiparous mothers before and after Computer Aided Instruction administration.

In the present study, Figure – 2 shows the level of knowledge during the pre test and 26(87) of primiparous mothers had acquired inadequate knowledge and 4(13) had acquired moderately adequate knowledge regarding lactation management in the pre test. In the post test, 18(60) of them had acquired moderately adequate knowledge and 12 (40) of them had acquired adequate knowledge as shown in figure 2.

The mean posttest knowledge (72.62) was higher than the mean pretest knowledge (42.93) with the standard deviation (12.94) and the obtained 't' value ( $t = 12.58$ ) was significant at  $p < 0.05$ . Hence the stated hypothesis (H1) was accepted.

The investigator found that inadequate knowledge during pre test was due to lack of information regarding lactation management. The computer aided instruction had improved their knowledge level during post test. The result of the study insists the importance of health education to the client and family, since health education increased their knowledge and improved their practice. So the expectant mothers need to be informed and motivated about lactation management during antenatal checkup.

These findings were supported by Malathy.D., et al.,(2008) who conducted a descriptive survey carried out in Chennai, among mothers at last trimesters of pregnancy concluded that the primigravida mothers attending the child birth preparation classes will have an adequate level of

knowledge and favorable attitude towards child birth preparation including lactation management.

Kelleher CM (2007) conducted a qualitative, comparative sociological study in 2 postpartum units in Boston clearly outlines the need for educating mothers about breast feeding in the prenatal period and during the first days after delivery, since the women experienced pain and discomfort during breast feeding.

Shu-Shan Lin., et al (2007) conducted a study to design a structured prenatal education programme on breastfeeding and to evaluate the effectiveness of the programme. Satisfaction with the programme was high. The rate of exclusive breastfeeding was higher for the experimental group at three days and one month postpartum.

Eveliyn Labbay (2006) did a study on the effect of lecture versus booklet on the knowledge and attitude of mothers regarding breastfeeding in barangay Libertad, Aurora, Zamboanga del Sur. The result in the said study showed that the knowledge significantly increased in both lecture and booklet groups 1 month after intervention. Both groups also improved in their attitude towards breast feeding.

M.Sai sunil kishore., et al., (2006) conducted in a rural population of the (Haryana) state to study their breastfeeding practices, knowledge regarding usefulness of breastfeeding and factors influencing the breastfeeding practices concluded as EBF/BBF practices and breastfeeding knowledge are suboptimal among the rural North Indian mothers. Breastfeeding counselling with emphasis on correct technique can improve the EBF/BBF rates.

The second objective of this study was to assess express practice regarding lactation management among primimothers before and after computer aided instruction administration.

In the present study, expressed practice regarding lactation management showed that 26( 87), 2(7) & 2(7) of them had obtained poor, satisfactory and good practice scores respectively in the pre test. 11(37) &19 (63) of them had obtained satisfactory and good practice scores respectively in the post test as shown in figure – 3.

The mean post test expressed practice (82.57) was higher than the mean pre test expressed practice (47.08) with the standard deviation (15.29) and the obtained 't' value ( $t = 12.703$ ) was significant at  $p < 0.05$ . So the corresponding hypothesis (H2) was accepted as shown in table – 2.

The investigator found that primigravida mothers had obtained poor practice scores during pretest and good practice scores during post test. These findings suggest that increases in knowledge may increase their expressed practice and also primimothers get awareness regarding rationale for their practice. So, concerted efforts must be made by the health professionals to become aware of the importance of lactation management through out their antenatal and postnatal period.

These findings were supported by Kervin BE., et al., (2010) who conducted a cross sectional study, states that the breast feeding outcomes have to be improved and need to strengthen the professional support strategies since it is directly related to the better breast feeding behaviors.

Thurman, Sara Elizabeth, et al., (2008) states that a positive correlation between IBCLC - International Board Certified Lactation

Consultant use and breastfeeding duration and promote a longer duration of breastfeeding at postpartum when utilized in primary care settings.

Veronica Valdes., et al., (1995) conducted an experimental study on the effects on professional practices of a 3 day course on breast feeding assessed and reported changes in clinical breast feeding support practices following a 3 day course.

The third objective of the study was to correlate the knowledge and expressed practice regarding lactation management.

The investigator found that there was a significant positive correlation ( $r = 0.84$ ) between the post test level of knowledge (mean = 72.67, standard deviation = 12.94) and post test level of expressed practice (mean = 82.57, standard deviation = 15.29) significant at  $p < 0.01$  as shown in table – 3.

These findings suggest that increase in knowledge may increase the expressed practice because the primimothers may be aware of the rationale for their practice. So health professionals should give current, accurate, consistent and non judgemental lactation management information to enhance successful breast feeding.

In the corresponding hypothesis 3 (H3), it was stated that there would be a significant relation between knowledge and expressed practice regarding lactation management among primimothers. The hypothesis 3 was accepted by the study findings.

The study findings were supported by Asia Retag Presas., (2007) conducted a quasi experimental study, concluded that the individual counseling on pure breast feeding was an effective intervention in

improving the knowledge and practice of pregnant mothers in their last trimesters.

Jacarol C., et al., (2003), conducted a prospective descriptive study on breast feeding knowledge, breast feeding confidence and infants feeding plan, effect on actual feeding practices. Results showed that breast feeding knowledge was strongly co-related with breast feeding confidence & actual lactation duration .

Nandhini.S, (2003) conducted a descriptive survey to assess the knowledge, attitude, practice and problems of postnatal mothers regarding breast feeding. Findings revealed that knowledge and attitudes about breast feeding among postnatal mothers reflect the believes and practices prevalent among the women in the community.

Nam Mi Kang (1999) who conducted a study on knowledge, attitude and practice regarding breast feeding among primiparous couples, revealed the relationship between practice of breast feeding and mothers knowledge and mothers attitude.

The fourth objective of the study was to associate the selected background variables (age, education, occupation, family income, religion, residence and birth order of mother) with post test level of knowledge.

As per table – 4, the present study showed that there was a significant association between the selected background variable family income ( $\chi^2 = 7.963$ ;  $df = 2$ ;  $p < 0.01$ ) and the post test level of knowledge at  $p < 0.01$  level. There was no significant association found between the post test level of knowledge and selected back ground variables of



mothers such as age, education, occupation, religion, residence and birth order among girl children in her family.

This study was supported by Shilaja KG(2008) conducted non-experimental descriptive design to assess the knowledge and confidence regarding exclusive breastfeeding among primipara mothers, revealed that there was a significant association between family income and type of family.

Vijiyalakshmi. S. et al., (2000) conducted a non equivalent control group study on breast feeding technique in prevention of nipple sore to primi postnatal mothers, revealed that the knowledge and skill gained in experimental group and the chi-square test showed a significant association between two groups.

The fifth objective of the study was to associate the selected demographic variables with post test level of expressed practice.

As per table – 5, the present study showed that there was significant association between the selected demographic variable age of mother ( $\chi^2 = 7.464$ ;  $df = 3$ ,  $p$  at 0.05 level). There was no significant association found between the post test level of knowledge and selected back ground variables of mothers such as education, occupation, family income, religion, residence and birth order among girl children in her family.

Bhavana singh (2010) conducted a case study on knowledge, attitude and practice of breast feeding, states that there was not much significant relationship between mother's age and (practice) duration of breast feeding. Most of them had adequate knowledge and practiced EBF

up to 6 months and followed rooming practices and initiated with in 1 hour of delivery. This study was contradict to my findings states that age and practice was not associated.

These findings were supported by Sumathy (2006) conducted an experimental study to evaluate the effectiveness of Structured Teaching Programme on knowledge and expressed practice on breast feeding practices among primigravida mothers concluded that there was significant association between practice and place of living (rural) in control group and no association between practice and experimental group.

Success of an Antenatal care (ANC) program depends on a greater or lesser degree of the co-operation of women. One of the aims of increased satisfaction with ANC is to achieve better compliance with the advice given, which leads to improve pregnancy outcome and health as well.

Education usually implies its practice. In this study prenatal lactation management education is associated with its practices such as longer duration of breast feeding and managing the lactation problems effectively. Their poor practices may be due to lack of information, support from family and health care providers and their family financial situation and not because of their background variables. So, in this study, there was no significant association between mothers post test knowledge and expressed practice with selected background variables such as education, occupation, religion, residence and birth order among girl children in their family except family income and age respectively. Therefore, the training of health workers in breast feeding and lactation

management enhances professional recommendations on breast feeding. The training of health workers however can play an important role in the promotion, protection and support feeding.

## CHAPTER-VI

### SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMEDATIONS.

This chapter presents the summary of the study and conclusion drawn. It clarifies the limitation of the study, the implications and the recommendation in different areas like nursing practice, nursing education, nursing administration and nursing research.

#### **Summary of the study**

The purpose of the study was to assess the effectiveness of Computer Aided Instruction (CAI) on knowledge and expressed practice of lactation management among primimothers.

The following objectives were set for the study

1. To assess the level of knowledge regarding lactation management before and after CAI.
2. To assess the expressed practice on lactation management before and after CAI.
3. To determine the relationship between knowledge and expressed practice on lactation management among primimothers.
4. To determine the association between knowledge on lactation management with selected background variables.

5. To determine the association between expressed practice on lactation management with selected background variables.

The conceptual model of the study was based on the Rosenstock's and Becker's health belief model. The study was conducted by using Pre experimental design one group pre test post test design. The sample size used for this study was 30 primimothers. Non probability convenience sampling technique was used to select the samples. Instrument used for data collection were self administered knowledge and expressed practice questionnaire. Computer Assisted Instructions (CAI) on lactation management among primimothers were given. The posttest was conducted after delivery.

Data was analyzed and interpreted in terms of objectives and research hypothesis. Descriptive statistics (Frequency, percentage, mean and standard deviation) and inferential statistics (paired 't'test, correlation coefficient and chi square) were used to test the research hypothesis.

#### SIGNIFICANT FINDINGS OF THE STUDY

Regarding percentage distribution of samples according to background variables most of the mothers were between 16-20years, regarding their education most of them were graduates, regarding the occupation, majority of them were house wives, family income shows that most of them were earning between 5001-10000 Rs/month. Most of them from urban area belongs to Hindu religion and majority of them were first born among girl children in her family.

In the present study, the level of knowledge during the pretest was inadequate among 26 (87) of subjects and moderately adequate among 4(13). In the post test, adequate knowledge among 12 (40) of the subjects, moderately adequate among 18(60) of the subjects. In the present study, the level of expressed practices during the pre test was poor among 26(87) of subjects, was satisfactory among 2 (7) subjects and was good among 2 (7) subjects. Where as during the post-test, it was good among 19 (63) of the subject and was satisfactory practice among 11 (37) of the subjects.

The paired 't' test shows the mean post test knowledge (76.62) was higher than the mean pre test knowledge (42.93) with the standard deviation (12.94) and the t' value ( $t = 12.580$ ) was significant at  $p < 0.05$  level. The mean post test expressed practice (82.57) was higher than the mean pre test expressed practice (47.08) with the standard deviation (15.29) and the 't' value (12.70) was significant at  $p < 0.05$  level.

There was positive correlation between knowledge (mean = 72.67, standard deviation = 12.94) and expressed practice (mean = 15.29, standard deviation = 15.29) in the post test. r value was ( $r = 0.84$ ). There was a positive correlation between knowledge and expressed practices of mothers. The CAI was effective in increasing the knowledge and expressed practice regarding lactation management among primimothers.

Significant association was found between the post test knowledge and background variable only for the mother's family income at  $p < 0.01$  level of significance. There was significant association found between post test expressed practice and the background variable only for the

mother's age at  $p < 0.05$  level of significance. There was no significant association found between the post test level of knowledge and expressed practice and selected back ground variables such as education, occupation, religion and birth order of the mother among girl children in her family.

## CONCLUSION

The study brought out the following conclusions.

In the pretest, knowledge and expressed practice of primimothers regarding lactation management was very poor. But in the post test, it was improved through the effectiveness of CAI regarding lactation management. So there was a strong relationship between knowledge and expressed practice. Thus, this study concluded that if the knowledge of mother is increased their practice also will improve.

Education on Lactation management is a safer and more effective intervention for primimothers.

Education on Lactation management improved the knowledge and practice of primimothers such as known about physiology of lactation, antenatal preparation, diet during lactation and management of minor discomforts occurs during lactation.

The mothers had improved their expressed practice as early initiated with in half an hour, fed the baby on demand and followed proper breast feeding technique.

The background variables of primimothers does not play any role with post assessment of knowledge and expressed practice on lactation management except family income and age respectively.

## IMPLICATIONS

The findings of the study have several implications on nursing practice, nursing administration, nursing education and nursing research.

### ***NURSING PRACTICE***

Numerous implications can be drawn from the present study for practice which promotes and creates a new dimension to nursing profession. Nursing practice on lactation management play vital role in reducing the mortality and morbidity of mother and babies.

The nurse, health professionals, and health practitioners are able to make significant contributions to promote the health status of mother and child.

The nurses can demonstrate correct breast feeding technique.

The study brings the positive effect on health status of newborn babies and primimothers.

Nurses can practise lactation management practices at antenatal ward, OPD, and postnatal ward.

Education on lactation management is a safe and effective intervention for mothers to follow proper breast feeding technique and management of minor discomforts of lactation at home itself.



This study findings will create the awareness among the nurses about importance of lactation management regarding antenatal and postnatal preparation of mothers for breast feeding, dietary management during lactation and practice of proper breast feeding techniques.

It helps the nurses to understand the effectiveness of teaching primimothers regarding lactation management.

### *NURSING EDUCATION*

The result of the study will help the nurse to enlighten their knowledge on importance of health education. They could also participate the client and family members in giving health education .Health education will enhance the knowledge and expressed practice of the people.

It helps the nurses to understand the effectiveness of teaching primi mothers regarding lactation management.

This study would help the student nurses to understand the importance of education of primimothers regarding lactation management.

Inservice education can be given to the nursing personnel regarding lactation management. To conduct seminars, workshops, conferences, symposium and micro teaching programs regarding lactation management to educate nursing personnel.

Nursing educators can encourage students to learn skills in demonstrating breast feeding technique to mother.

Nursing education should emphasize the concept of involvement of the family in the care of the mother and baby.

The study will help the students to give nursing care with in minimum resources in hospital and community.

### *NURSING ADMINISTRATION*

One of the findings of this study revealed that the lactation management before & after delivery is beneficial. Here it would help the nurse administrators to understand the significance of lactation management practices before & after delivery.

It would help the administrators to insist on exclusive breast-feeding for six months.

Baby friendly hospital initiative should be introduced and practiced to all the hospitals.

There can be improvement of practices without any additional budget or special instruments and with existing number of personnel.

Nurse administrators can make a policy decision to teach lactation management class to mothers for effective wellbeing of mother and baby and to announce the importance of lactation management practices through medias, posters, charts, pamphlets, and hand out.

### *NURSING RESEARCH*

The present study would help the future nurse researchers to carry out further studies in determining the needs properly by comparing with present study findings.

This study findings would also help the nurse researchers in study the proper lactation management practices and ways to solve the problems.

Through this study, the investigator can practice evidence based research to disseminate the findings.

The study can be done in high risk mothers who have an indication for lactation .

Nurses must develop newer instructional technology towards nursing education and nursing practice on care of antenatal mothers.

To encourage the researchers, to set long term goals regarding lactation management and stimulate them to achieve the goal.

The study can be conducted with a large number of sample.

Lactation management practices may be studied more scientifically and used as a evidence based nursing interventions.

## LIMITATION

1. The study was limited to 30 sample. So the study findings limits the generalisation. Hence, generalisation can only be made for sample studied.
2. The mothers were not randomly assigned. The convenience sampling restricts the generalization.
3. Further follow up care for longer duration to know the effect of lactation management on mothers and babies weight gain and other developmental aspect could not done due to time constraint.

4. Follow up developmental assessment on lactation management practices can be done in the community set up.
5. The study assessed only the knowledge and expressed practice, where as the actual practice was not assessed.

## RECOMMENDATIONS

1. A similar study can be conducted/replicated on a large sample to generalise the study findings.
2. A comparative study can be conducted in rural and urban areas
3. A similar study can be conducted to find out the attitude of lactation management among primimothers
4. Similar study can be conducted psychological feelings of mothers during lactation by qualitatively
5. A similar study can be conducted with problems encountered with lactation.
6. A SIM can be developed based on the needs of the mothers.

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**APPENDIX**  
**APPENDIX - A**  
**LETTER REQUESTING TO VALIDATION**

From

Mrs. A. Sheela Margaret,  
II Year M.Sc (N),  
Dr. G. Sakunthala College of Nursing,  
T.V. Kovil,  
Trichy – 5.

To

Through

The Principal,  
Dr. G. Sakunthala College of Nursing,  
T.V. Kovil,  
Trichy – 5.

Respected Sir,

**Sub:** *Letter Requesting opinion and suggesting from Experts for establishing content validity of the tool.*

I am A. Sheela Margaret M.Sc. nursing student of Dr. G. Sakunthala College of Nursing, T.V. Kovil, Trichy – 5. As part of my course, I am doing study on the topic mentioned below.

‘A pre experimental study to determine the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichirappalli’.

May I request you to go through and validate the content of the tool. Please give your valuable suggestion for modifying the tool.

Thanking you,

Your’s sincerely,  
**A. Sheela Margaret**  
II Year M.Sc (N) Student,

## **APPENDIX – B**

### **LIST OF EXPERTS CONSULTED FOR THE CONTENT VALIDITY OF RESEARCH TOOL**

1. **Prof. Roseline Rachel,**  
Principal,  
Indira College of Nursing,  
Thiruvallur.
  
2. **Prof. Dhanush,**  
Principal,  
Manukula Vinayagar College of Nursing,  
Madhagadipet,  
Pondicherry.
  
3. **Mrs. Terese,**  
Principal,  
Keerai Tamil Selvan College of Nursing.
  
4. **S. Petchiammal, M.Sc., (N),**  
Principal,  
Saraswathy College Nursing,  
Thiruvanantha puram,  
Kerala.
  
5. **Dr. Kanthamani., M. D., DGO., F.I.C.M.C.H.,**  
Prof. In obstetrics and gynaecology  
GVN Hospital, Trichy



PART -II

**KNOWLEDGE QUESTIONNAIRE RELATED TO  
LACTATION MANAGEMENT:**

1. What is meant by breastfeeding?
  - a. Natural feeding
  - b. Supplementary feeding
  - c. Complementary feeding.
2. What is exclusive breast feeding?
  - a) Feeds breast milk along with water
  - b) Feeds breast milk only
  - c) Feeds breast milk along with cow`s milk
3. When do you start preparing your breast for breastfeeding?
  - a) After the onset of pain
  - b) Before baby`s birth.
  - c) After baby`s birth.
4. When will be the breastfeeding started for a mother who undergo normal vaginal deliveries?
  - a) Immediately after the baby is delivered.
  - b) Only after 24 hours
  - c) Only after 3 days
5. When will you start breastfeeding for babies delivered by cesarean section?
  - a) After 24 hours
  - b) After 12 hours
  - c) As soon as the mother is able to respond
6. Which of the following are influencing the secretion of milk?
  - a) Mother`s height and weight

- b) Intake of food and water by the mother ( )
- c) According to the size of the breast ( )
- 7. When will be the milk production increased?
  - a) Increased intake of lactation stimulating agents ( )
  - b) Frequent sucking of the baby at breast. ( )
  - c) More intake of water ( )
- 8. How long will be the colostrums secreted?
  - a) Within 7 days after delivery ( )
  - b) Within 3 days after delivery ( )
  - c) Within 1 month after delivery ( )
- 9. What is highly present in colostrums?
  - a) Protein & antibodies ( )
  - b) Carbohydrate & water ( )
  - c) Vitamins & Minerals. ( )
- 10. Which of the following are lactation stimulating agents?
  - a) Garlic & Jiggery ( )
  - b) All the fruits ( )
  - c) All the vegetables ( )
- 11. What could be used to wipe or wash the breast before feeding the baby?
  - a) Water only ( )
  - b) Use soap ( )
  - c) Use antiseptics ( )
- 12. How long should be the exclusive breastfeeding given?
  - a) Up to 1 year after delivery. ( )
  - b) 4-6 months after delivery. ( )
  - c) Up to 9 months after delivery. ( )

13. How often the baby can be fed at breast?
- a) According to the baby's demand. ( )
  - b) According to the time of previous feed consumption. ( )
  - c) According to the time schedule followed by the mother as per her wish. ( )
14. Which substance will inhibit the flow of milk?
- a) Increased intake of Milk ( )
  - b) Increased intake of Fruit juices ( )
  - c) Increased intake of Coffee / tea ( )
15. How long the mother can feed the baby at each breast?
- a) 15-20 minutes / each breast. ( )
  - b) 30 minutes / each breast. ( )
  - c) 5 minutes / each breast. ( )
16. What is the advantage of giving breast milk for a baby?
- a) Easily digestible ( )
  - b) It takes long time to digest. ( )
  - c) Easily lose its potentialities. ( )
17. How much more energy does she require while feeding the baby?
- a) 500 Kilocalories ( )
  - b) 1000 Kilocalories ( )
  - c) > 1500 Kilocalories ( )
18. What is the essential diet for the postnatal mother?
- a) Increased protein & calcium ( )
  - b) Increased carbohydrate & fat ( )
  - c) Increased amount of lactating stimulating agents. ( )
19. When will be the breast secretes adequate breast milk?
- a) Immediately after delivery. ( )

- b) After one week of delivery. ( )
- c) After 3<sup>rd</sup> or 4<sup>th</sup> postnatal day. ( )
20. What should be the baby given before first breastfeed?
- a) Water/glucose water ( )
- b) Honey. ( )
- c) Nothing. ( )
21. What is the indication of adequate breastfeeding?
- a) Baby sleeps for 2-3 hours after feeding. ( )
- b) Baby passes urine up to 3 times after feed per day. ( )
- c) Baby is not putting its own hand into mouth and starts sucking ( )
22. Why does the breast engorgement occurs?
- a) Because of Increased production of milk. ( )
- b) Because of infrequent feeding. ( )
- c) Because of delay in emptying. ( )
23. How can you relieve the breast engorgement at home?
- a) By manual expression along with hot application. ( )
- b) Make the baby to suck at engorged breast. ( )
- c) Taking medications which suppress milk production. ( )
24. Which position is best suitable for breast feeding?
- a) Sitting in a comfortable position. ( )
- b) Side lying position. ( )
- c) According to the situation of the mother and the baby. ( )
25. What disease is prevented by breastfeeding?
- A) Breast cancer ( )
- b) Skin & Respiratory problems. ( )
- c) Obesity. ( )



**EXPRESSED PRACTICE QUESTIONAIRE  
ON LACTATION MANAGEMENT**

<b>S.no</b>	<b>Items</b>	<b>Never (0)</b>	<b>Occasional (1)</b>	<b>Always (2)</b>
1	I take bath & Change my dress every day.			
2	I take well balanced diet along with lactation stimulating agents.			
3	I wear brazier to support my breast.			
4.	I drink milk before feeding.			
5.	I wash hands before each feeds.			
6.	I feed the baby according to its demand.			
7	I start first breast feed within 1/2an hour of birth of baby.			
8	I choose sitting position in a relaxed situation before feeding.			
9	I Keep the nipple up to the areola into the Baby's mouth.			
10	I feed the baby about 15-20minutes at each breast.			
11	I see swallowing during feeding			
12	I concentrate my attention fully on the baby's sucking.			
13	I burp the baby after feeding.			
14	I place the baby on right lateral position after feeding.			

15	I feel my both the breasts were soft.			
16	I feel confident in breast feeding technique.			
17	I am encouraged & supported by my family members.			
18	I relieve / express the breast milk along with hot application if engorgement occurs.			
19	I feel breast feeding leads to inability to carryout daily activities.			
20	I did not give any additional milk or water to the baby.			

**SCORING KEY FOR KNOWLEDGE  
QUESTIONNAIRE**

Question no	Options		
	A	B	C
1	1	0	0
2	0	1	0
3	0	1	0
4	1	0	0
5	0	0	1
6	0	1	0
7	0	1	0
8	0	1	0
9	1	0	0
10	1	0	0
11	1	0	0
12	0	1	0
13	1	0	0
14	0	0	1
15	1	0	0
16	1	0	0
17	1	0	0
18	1	0	0
19	0	0	1
20	0	0	1
21	1	0	0
22	0	1	0
23	1	0	0
24	0	0	1
25	1	0	0

### SCORING KEY FOR EXPRESSED PRACTICE QUESTIONNAIRE

S.NO	ITEMS	NEVER	OCCASIONAL	ALWAYS
1	1	0	1	2
2	2	0	1	2
3	3	0	1	2
4	4	0	1	2
5	5	0	1	2
6	6	0	1	2
7	7	0	1	2
8	8	0	1	2
9	9	0	1	2
10	10	0	1	2
11	11	0	1	2
12	12	0	1	2
13	13	0	1	2
14	14	0	1	2
15	15	0	1	2
16	16	0	1	2
17	17	0	1	2
18	18	0	1	2
19	19	2	1	0
20	20	2	1	0

## பொதுவான விவரங்கள்

முன்னுரை

வணக்கம். அஷீலா மார்கிரோட் என்கிற நான் சகுந்தலா செவிலியர் கல்லூரியில் படிக்கும் மாணவி. நான் தாய்ப்பாலூட்டும் முறை மற்றும் அதன் நன்மைகள் பற்றிய அறிவை தெரிந்துக்கொள்ள விரும்புகிறேன். அதனால் உங்களை இந்த ஆய்வில் பங்கெடுத்து கொள்ளுமாறு வேண்டிக் கொள்கிறேன். உங்களுடைய தகவல்கள் ரகசியமாக வைத்துக்கொள்ளப்படும் என உறுதியளிக்கிறேன்.

## பகுதி - I

மாதிரி எண்

1. வயது
  - அ) 16 – 20 வயது
  - ஆ) 21 – 35 வயது
  - இ) 26 – 30
  - ஈ) >31 வயது
2. கல்வித்தகுதி
  - அ) படிக்காதவர்
  - ஆ) ஆரம்ப கல்வி
  - இ) உயர்நிலைக்கல்வி
  - ஈ) கல்லூரிப் படிப்பு
3. தொழில்
  - அ) வேலைபார்க்காதவர்
  - ஆ) கூலிவேலை
  - இ) தனியார் பணி
  - ஈ) அரசு பணி

4. குடும்பத்தின் மாதவருமானம் (ரூபாய்)
- அ) 1500 – 3000
  - ஆ) 3000 – 5000
  - இ) 5001 – 10,000
  - ஈ) >10,000
5. வசிக்கும் இடம்
- அ) கிராமம்
  - ஆ) நகரம்
6. மதம்
- அ) இந்து
  - ஆ) கிறிஸ்தவர்
  - இ) முஸ்லீம்
  - ஈ) பிற மதத்தவர்
7. பெண் குழந்தையின் பிறப்பு வரிசை
- இ) முதலாவது
  - ஆ) இரண்டாவது
  - இ) மூன்றாவது
  - ஈ) நான்கு மற்றும் அதற்கு மேல்

## பகுதி - II

### தாய்பால் பற்றிய அறிவிற்கான கேள்வ படிவம்

தயவு செய்து கீழ்க்கண்ட கேள்விகளுக்கு தகுந்த பதில்களை கவனமாக கேட்டு அல்லது படித்து (டிக்) ( ) செய்யவும்.

1. தாய் பாலூட்டுதல் என்றால் என்ன? ( )  
அ) இயற்கை உணவூட்டுதல்  
ஆ) பதிலுணவூட்டும் முறை  
இ) தாய்பாலோடு சேர்த்து மற்ற இணை உணவுகளை ஊட்டும் முறை
2. முழுமையான தாய்ப்பாலூட்டுதல் என்றால் என்ன? ( )  
அ) தாய்பாலோடு தண்ணீரையும் சேர்த்து கொடுப்பது  
ஆ) தாய்பால் மட்டுமே கொடுப்பது  
இ) தாய்ப்பாலோடு பசும்பாலையும் சேர்த்து கொடுப்பது
3. எப்பொழுது நீங்கள் உங்கள் மார்பகத்தை பாலூட்ட தயார் செய்வீர்கள்? ( )  
அ) பிரசவவலி தொடங்கிய பிறகு  
ஆ) குழந்தை பிறப்பதற்கு முன்னர்  
இ) குழந்தை பிறப்பதற்கு பின்னர்
4. எப்பொழுது சுக பிரசவமான தாய்மார்கள் பாலூட்ட ஆரம்பத்தல் வேண்டும்? ( )  
அ) குழந்தை பிறந்த உடனேயே  
ஆ) 24 மணிநேர குழந்தை பிறப்பிற்கு பின்னர்  
இ) குழந்தை பிறந்த மூன்று நாட்களுக்கு பின்னர்
5. அறுவை சிகிச்சை மூலம் பிரசவமான தாய்மார்கள் எப்பொழுது தாய்ப்பாலூட்ட ஆரம்பித்தல் வேண்டும்? ( )  
அ) 24 மணி நேரத்திற்கு பின்னர்  
ஆ) 24 மணி நேரத்திற்கு பின்னர்  
இ) தாய் மயக்கத்திலிருந்து தெளிந்த உடனேயே
6. கீழ்க்கண்டவற்றுள் எதுதாயின் பால்சுரக்கும் அளவை பாதிக்கும் காரணி? ( )  
அ) தாயின் உயரம் மற்றும் எடை  
ஆ) தாயின் உணவு மற்றும் தண்ணீர் அளவு பொருத்தது  
இ) தாயின் மார்பளவை பொறுத்தது
7. எப்பொழுது பால்சுரப்பு அதிகரிக்கும்? ( )  
அ) அதிகளவு பால்சுரப்பு அதிகரித்திட செய்யும் பொருட்களை உண்ணும் பொழுது  
ஆ) குழந்தையே அடிக்கடி மார்பகத்தல் சப்பவிடும் பொழுது  
இ) அதிகளவு தண்ணீர் குடிக்கும் பொழுது
8. எவ்வளவு நாட்கள் சீம்பால் சுரப்பு இருக்கும்? ( )  
அ) குழந்தை பிறந்த ஏழு நாட்களுக்குள்  
ஆ) குழந்தை பிறந்த மூன்று நாட்களுக்குள்  
இ) குழந்தை பிறந்த ஒரு மாதத்திற்குள்

9. சீம்பாலில் அதிகளவு இருப்பது என்ன? ( )  
 அ) புரதம் மற்றும் நோய் எதிர்ப்பு சக்தி தருவன  
 ஆ) மாவச்சத்து மற்றும் தண்ணீர்  
 இ) வைட்டமின்கள் மற்றும் தாதுஉப்புக்கள்
10. தாய்பால் சுரப்பை தூண்டும் பொருட்கள் யாவை? ( )  
 அ) பூண்டு மற்றும் வெல்லம்  
 ஆ) எல்லாவித பழவகைகளும்  
 இ) எல்லாவித காய்கறிகளும்
11. தாய் குழந்தைக்கு பாலூட்டும் முன்னர் மார்பகத்தை எதை கொண்டு கழுவ அல்லது துடைக்க வேண்டும்? ( )  
 அ) தண்ணீர் மட்டும்  
 ஆ) சோப்பு பயன்படுத்தலாம்  
 இ) கிருமி நாசினியை பயன்படுத்தலாம்
12. எவ்வளவுநாட்கள் முழுமையான தாய்பால் மட்டுமே கொடுக்க வேண்டும்? ( )  
 அ) குழந்தை பிறந்த 1 வருடம் வரை  
 ஆ) 4 – 6 மாதங்கள் குழந்தை பிறப்பிற்கு பின்னர்  
 இ) 9 மாதங்கள் குழந்தை பிறப்பிற்கு பின்னர்
13. எத்தனை முறை குழந்தையை மார்பகத்தில் பாலூட்ட வேண்டும்? ( )  
 அ) குழந்தையின் தேவைக்கேற்ப  
 ஆ) முன்பு தாய்பால் குடித்த நேரத்தை பொறுத்து  
 இ) தாயின் விருப்பத்திற்கேற்ப அவர்கள் பின்பற்றும் கால அட்டவணையை பொறுத்து
14. எந்த பொருள் பால்சுரப்பை தடைசெய்யும்? ( )  
 அ) பால்  
 ஆ) பழச்சாறுகள்  
 இ) காபி டீ
15. எவ்வளவு நேரம் ஒவ்வொரு மார்பகத்திலும் தாய் பாலூட்ட வேண்டும்? ( )  
 அ) 15 - 20 நிமிடம்/ஒரு மார்பகம்  
 ஆ) 20 நிமிடம் /ஒரு மார்பகம்  
 இ) 5 நிமிடம் /ஒரு மார்பகம்
16. தாய் பாலூட்டுதலால் குழந்தைக்கு ஏற்படும் நன்மை எது? ( )  
 அ) எளிதில் ஜீரணிக்கக்கூடியது தன்மை  
 ஆ) இது செரித்திட அதிக நேரம் எடுத்துக்கொள்ளாதல்  
 இ) எளிதில் இதன் தன்மைகளை இழந்துவிடுதல்
17. எவ்வளவு அதிகமான அளவு சக்தி தாய்பாலூட்டும் தாய்மார்களுக்கு தேவைப்படுகிறது? ( )  
 அ) இரண்டு மடங்கு அதிகம்  
 ஆ) ஒன்றரை மடங்கு அதிகம்  
 இ) மூன்று மடங்கு அதிகம்



18. குழந்தை பிறப்பிற்கு பின்னர் தாய்மார்கள் உட்கொள்ளும் உணவில் எந்த பொருட்கள் முக்கியமாக அடங்கியிருக்க வேண்டும்? ( )
- அ) அதிகளவு புரதம் மற்றும் கால்சியம்  
ஆ) அதிகளவு மாவுச்சத்து மற்றும் கொழுப்புச்சத்து  
இ) அதிகளவு பால்சுரப்பை அதிகப்படுத்தும் உணவு பொருட்கள்
19. எப்பொழுது மார்பகம் போதுமான அளவு தாய்பாலை சுரக்கும்? ( )
- அ) குழந்தை பிறந்த உடனேயே  
ஆ) குழந்தை பிறந்த ஒருவாரம் கழித்து  
இ) குழந்தை பிறந்த 3 அல்லது 4-ம் நாளிலிருந்து
20. குழந்தைக்கு முதல்முறை தாய்பாலூட்டும் முன்னர் என்ன கொடுக்க வேண்டும்? ( )
- அ) தண்ணீர் /சர்க்கரை சேர்த்த தண்ணீர்  
ஆ) தேன்  
இ) ஒன்று கொடுக்கக்கூடாது
21. போதுமான அளவு பால்குடித்ததற்கான அறிகுறி என்ன? ( )
- அ) குழந்தை 2-3 மணி நேரம் பால்குடித்தவுடன் உறங்குவது  
ஆ) குழந்தை பால்குடித்தபிறகு ஒரு நாளைக்கு 2-3 முறை சிறுநீர் கழிப்பது  
இ) குழந்தை தன் கையை வாயில் வைத்து சப்பாமல் இருப்பது
22. எதனால் மார்பகத்தில் பால் கட்டுகிறது? ( )
- அ) அதிக பால்சுரப்பு இருப்பதனால்  
ஆ) அடிக்கடி பாலூட்டமல் இருப்பதனால்  
இ) சுரந்த பாலை காலியாக்குவதில் தாமதிப்பதால்
23. எவ்வாறு பால்கட்டுதலை வீட்டிலேயே சமாளிக்க முடியும்? ( )
- அ) வெந்நீர் ஒத்திடம் கொடுத்து கையாலேயே பாலை எடுத்து விடுவது  
ஆ) குழந்தையை பால்கட்டிய மார்பகத்திலேயே பாலை எடுத்து விடுவது  
இ) பால்சுரப்பை கட்டுப்படுத்தும் தடுக்கும் மருந்து பொருட்களை உட்கொள்வது
24. எந்த நிலையானது குழந்தைக்கு தாய்பால் கொடுக்க ஏற்றது? ( )
- அ) தளர்வாக அமர்ந்து கொடுத்தல்  
ஆ) ஒரு பக்கமாக ஒருக்களித்து படுத்துக் கொடுத்தல்  
இ) தாய் மற்றும் சேயின் வசதியான சூழ்நிலையை பொருத்து
25. தாய்பாலூட்டுவதால் எந்த நோய் தடுக்கப்படுகிறது? ( )
- அ) மார்பக புற்றுநோய்  
ஆ) மூச்சு சம்பந்தப்பட்ட வியாதிகள்  
இ) உடல் பருமனாவது

பகுதி - III

செயல்முறை பற்றிய வினாக்கள்

வ. எண்	பொருளடக்கம்	ஒரு போதும் இல்லை	எப்பொழுதாவது	எப்பொழுதும்
1.	நான் தினமும் குளித்து ஆடைகளை மாற்றுவேன்			
2.	நான் சரிவிகித உணவுடன் பால்சுரப்பை அதிகப்படுத்தும் உணவுப் பொருட்களை உட்கொள்வேன்.			
3.	நான் பொருத்தமான உள் ஆடையை மார்பகத்திற்கு சப்போர்டாக அணிவேன்.			
4.	நான் பால் ஒவ்வொரு முறை பாலூட்டும் முன்னரும் குடிப்பேன்.			
5.	நான் ஒவ்வொரு முறை பாலூட்டும் முன்னரும் கைகளை கழுவவேன்.			
6.	நான் குழந்தைக்க அதன் தேவைக்கேற்ப பாலூட்டுவேன்.			
7.	நான் குழந்தை பிறந்த அரை மணிநேரத்திற்குள்ளேயே பாலூட்டுவேன்.			
8.	நான் தளர்ந்த நிலையில் அமர்ந்து பாலூட்டும் முறை தேர்ந்தெடுப்பேன்.			
9.	நான் மார்பகாம்பு மற்றும் ஏரியோலா குழந்தை வாயினில் புகுத்துவேன்.			
10.	நான் 15-20 நிமிடம் வரை ஒவ்வொரு மார்பகத்திலும் பாலூட்டுவேன்.			
11.	நான் குழந்தை விழுங்குவதை பாலூட்டும் பொழுது பார்ப்பேன்.			
12.	நான் பாலூட்டும் பொழுது என் முழு கவனத்தையும் குழந்தை பால் குடித்தலில் இருக்கும்.			
13.	நான் குழந்தைக்கு பாலூட்டிய பின் முதுகு தட்டி ஏப்பம்விடச்செய்வேன்.			
14.	நான் குழந்தையை வலது புறமாக ஒருக்களித்து படுக்கவைப்பேன்.			
15.	நான் என் இரண்டு மார்பகமும் இலேசாக இருப்பதாக உணர்கிறேன்.			
16.	நான் பால் புகட்டுதலில் தன்னம்பிக்கையும் இருப்பதாக உணர்கிறேன்.			

17.	நான் என் குடும்ப உறுப்பினர்களால் சப்போர்ட் செய்யப்படுகிறேன்.			
18.	நான் பால்கட்டும்பொழுது வெந்நீர் ஒத்திடம் கொடுத்து கட்டிய பாலை எடுத்துவிடுவேன்.			
19.	நான் தாய்பாலூட்டுவதினால் என் அன்றாட வேலை பாதிக்கப்படுவதாக உணர்கிறேன்.			
20.	நான் ஒருபோதும் தண்ணீர் அல்லது மற்ற பால்பொருட்களை தருவதில்லை.			

## **COMPUTER AIDED INSTRUCTION ON LACTATION MANAGEMENT**

Group	: Primimothers
Venue	: Jagada Maternity Hospital
Time	: 45 minutes
Teaching method	: Computer Assisted Instruction and Discussion
Language	: Tamil
Audio Visual Aids Used	: Computer with Power point Slides.

## **GENERAL OBJECTIVES**

The primimothers will be able to acquire knowledge and practice on Lactation management and apply this knowledge during post natal period and there by preventing the occurrence of health problem in their future life.

### **SPECIFIC OBJECTIVES**

The Primimothers will be able to,

- Introduce the topic
- Describe the Physiology of lactation / milk production
- List down the advantages of breast feeding
- Explain the management of breast feeding.
- Mention the foods necessary during pregnancy and lactation period
- Explain about the preparation before feeding
- Explain the positions used for breast feeding.
- Teach the feeding technique
- Describe the frequency of feeding.
- Explain the technique of burping
- Explain the management of problems associated with breast feeding:

S.NO	SPECIFIC OBJECTIVES	DURATION	CONTENT	TEACHER ACTIVITY	LEARNER ACTIVITY	EVALUATION
1	Introduce the topic  <b>Primi Mothers will be able to ;</b>	1 mt	<b>Introduction:</b> Lactation is the physiological process which leads to the secretion of milk in alveoli of the female breast, its passage along the ducts due to the " let down reflex" and its ejection into the mouth of the baby by sucking.	Introducing	Listening and interacting with investigator	
2	Describe the Physiology of milk production	3 mts	<b>Physiology of Lactation/Breast Milk Secretion:-</b>	Describing by the use of computer as power point	Listening	How the breast milk produces in the body

			<p><b>The physiological basis of lactation is divided into four phases.</b></p> <ul style="list-style-type: none"> <li>* Preparation of breasts</li> <li>* Synthesis and secretion from the breast alveoli</li> <li>* Ejection of milk</li> <li>* Maintenance of lactation</li> </ul> <p>During Pregnancy cells in the breast form milk producing lobules (Sac like structure in the breast that stores milk) Hormones from the placenta stimulate these changes in the breast. After birth the mother produces more Prolactin hormone to maintain the changes in the breast and therefore the ability to produce milk, During pregnancy, breast weight increases by about 1-2lb.</p>		
			<p>The hormones Prolactin also stimulates the synthesis of milk suckling stimulates Prolactin release. The more the infant suckles the more milk is produced. Demand is the driving force for milk production.</p>		
			<b>Let Down Reflex</b>		

			<p>* An important brain-breast connection the let down reflex is necessary for breast-feeding. The brain releases the hormone Oxytocin to allow the breast tissues to let down (reflex) the milk from storage sites. It travels to the nipple area. A tingling sensation signals the let down reflex does not operate, little milk is available to the infant. Infant then gets frustrated and this can frustrate the mother.</p>		
			<p>* The let down reflex is easily inhibited by nervous tension, a lack of confidence and fatigue. They need to find a relaxed environment where they can breast feed.</p>		
			<p>* After a few weeks the let down reflex becomes automatic. The mother response can be triggered just by thinking about her infant or seeing or hearing another one.</p>		
			<p>* Softening of breast during feeding helps indicate that enough milk is being consumed parents who sense their infant is not consuming enough milk should consult a physician immediately because dehydration can develop rapidly.</p>		



3	List down the advantages of breast feeding	3 mts	<p><b>Advantages of Breast Feeding</b></p> <p>For mother:-</p> <ul style="list-style-type: none"> <li>* Enhances a close mother-child relationship.</li> <li>* Decreases the risk of Ovarian and breast cancer.</li> <li>* It helps the uterus regain its normal size from enlargement during pregnancy. So delayed postpartum haemorrhage is less common.</li> <li>* Readily available at right temperature.</li> <li>* Reduces cost of feeding and preparation time.</li> </ul>	Describing by the use of computer as power point	Observing and asking their doubts	Tell the advantages of breast feeding.
			<p>For Baby:</p> <ul style="list-style-type: none"> <li>* Ideal composition for easy digestion.</li> <li>* Colostrums which is secreted for the first three days is nutritious and prevents diseases. (It rich in protein and contains antibodies and immunosystem cells protects from Gastro Intestinal diseases and other infectious diseases.</li> <li>* Breast fed babies show marked decreased in respiratory infections allergic reactions, asthma and fever.</li> <li>* Readily available for the baby at right temperature.</li> <li>* Helps in character building.</li> <li>* Breast fed babies have better cognition and IQ score later in life.</li> </ul>			

4	explain the management of breast feeding.	5mts	<p><b>Management of breast feeding:</b>  Immediately after birth the mother should cuddle the newborn infant to her breasts for about 15 minutes and allow the baby to suck for 1- 2 minutes at each breast.</p> <ul style="list-style-type: none"> <li>* Early sucking also releases the hormone prolactin and oxytocin which stimulate milk secretion and help the uterus to contract.</li> <li>*Privacy must always be provided.</li> <li>* The mother's position needs to be comfortable</li> <li>*The baby must be allowed to play at the breast and nipple before starting to suck as this acts as an excellent stimulus for milk flow.</li> <li>* The infant should be allowed to take the whole nipple and areola into his mouth and allow feed until satiated.</li> </ul>	Describing by the use of computer as power point	Listening and interacting with investigator	explain the management of breast feeding
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5	mention the foods necessary during pregnancy and lactation period	5mts	<p><b>Foods necessary for Pregnancy and Lactation:</b></p> <ul style="list-style-type: none"> <li>*The mother should take adequate fluids to maintain milk supply. Women who are breast feeding should drink at least 4-8 glasses of fluids per day. They need to increase the calories intake about 500 calories per day then ordinary (usual) need.</li> <li>*Mother should eat well balanced food for eg., Ragi, Jaggery, Milk combines food are good for lactation. <ul style="list-style-type: none"> <li>* The mother can drink only two glasses of coffee per day. She should not drink more than 7 or 8 glasses of coffee because women need iron supplements during pregnancy and lactation, caffeine readily crosses the placental barrier consuming over 7 cups results in spontaneous abortion, still birth, premature birth and birth defects.</li> </ul> </li> <li>*During lactation the mother should eat high calorie food mainly iron and vitamin containing foods like green leafy vegetables, milk, egg, wheats, nuts, and pulses, Green turnip, Drumstick leaves, Bhadam Kheer groundnut Kheer, Carrot.</li> <li>* Garlic, Onion chutney and pulses and nuts are food choice that increases milk production.</li> <li>*Mother should drink milk or milk products 500ml per day.</li> </ul>	Describing by the use of computer as power point	Listening and interacting with investigator	Tell the food items which increases breast milk secretion.
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			<p>* Green leafy vegetables taken during lactation increases iron and vitamin supplements.</p> <p>* Fruits such as citrus, melon, tomato strawberry, Bread and Cereals, Orange are food choices that increase vitamin supplements.</p> <p>* The non-vegetarian foods like goat's meat, fish and mutton that increase secretion of breast milk.</p> <p>* Soups and Rasam are good appetizers and helps in digestion.</p>		
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6	Discuss about the antenatal Preparation of mother	5Mts	<p>Preparation during antenatal period</p> <ul style="list-style-type: none"> <li>*Teach all pregnant women about benefits of breast feeding.</li> <li>* The mother should take adequate rest. Advise the family members to avoid giving hard works because it interferes with mothers well being on breast feeding.</li> <li>*The breast should be examined antenatal to prevents problems while feeding. Identify whether any cracked, flat or inverted nipples.</li> <li>* The mother should avoid applying soap on her nipples to prevent problems.</li> <li>* Use of creams, nipple rolling, pulling and rubbing to the nipples is unnecessary and causes irritation.</li> </ul>	Describing by the use of computer as power point	Observing and asking their doubts	How will you prepare yourself to feed Your baby.
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\* Teach the mother that frequent suckling complete emptying of breast, correct positioning and supportive care are the corner stone of successful lactation. \* Felt that successful lactation is dependent not only upon adequate diet, but also upon sufficient rest for the mother, freedom from anxiety and a desire to nurse the baby.

\* Let down reflex is easily inhibited by nervous tension, lack of confidence and fatigue.

\* Teach about breast hygiene. Breast should be washed /wiped with plain water before each feed to prevent entry of infection for baby. The mother response can be triggered just by thinking about her baby or seeing and talking to the baby, or hearing another one.

			<p><b>Assisting with the First Feeding:</b></p> <ul style="list-style-type: none"> <li>*Mother should feed the baby within half an hour after delivery.</li> <li>* Early feedings might consist of 5-10 suckling on breast while nipples are accustomed to it.</li> <li>*Frequent suckling stimulates production of milk and reduces severity of engorgement.</li> <li>* Palpate breast to see if they are soft, filling or engorged. Soft breasts feels like a chin.</li> </ul> <p>Engorged breast are hard and tender with taut, shiny skin, reduces redness or lumps within breasts are noted.</p> <ul style="list-style-type: none"> <li>* Engorged breast milk should not be given to the baby because it produces GI disturbances for baby.</li> </ul>		
7	Explain about the preparation before feeding	6mts	<p><b>Teaching Feeding Techniques:</b></p> <ul style="list-style-type: none"> <li>* Teach the mothers to drink some fluids before each feed to prevent dehydration for mother.</li> <li>* Mother should wash her hands.</li> <li>* Ask the mother to wipe /washed the breast with plain water before feed.</li> <li>* No soap is used to prevent cracked nipples.</li> <li>* Mother should rest comfortably and relaxed use pillows for support.</li> </ul>	Describing by the use of computer as power point	Listening and observing
			how will your prepare yourself before feed.		

8	Explain the positions used to feed	4mts	<p>* Comfort is more useful, it relieves from pain.          * Privacy should be provided to avoid embarrassment.          * Mother holds the baby in a comfortable position.</p> <p>1) Cradle or sitting position    2) Side-lying position          3) Foot ball hold</p> <p><b>Cradle or sitting position</b>          Mother sits comfortably and resist the infants head is rest of her arm. If needed pillow may be place it under elbow to minimize fatigue. Mother tucks infants lower arm along the body, so it stays of way . Infants stomach and jaw should face and touch mother's stomach sitting position is best to feed the baby.  <b>Side lying position:-</b></p>	Describing by the use of computer as power point	Listening and asking doubts.	Which position is best suited to feed.
			<p>* This is useful for night feeding and mother who have pain in sutured area and useful for caesarean deliveries.</p> <p>* Mother lays side with stomach facing infants' stomach and head of infants near mother breast.</p>			



				As infants mouth widely opens, pull infants mouth toward mother's nipples pillows kept behind mother back and between legs to provide comfort. The mother's areola of breast should be inside baby's mouth to suckle. If the baby suckles only the nipple means the milk will not produce properly.			
				<b>Food Ball Hold:-</b>			
				* The mother supports the infants head in her hand with infants body resting in pillows alongside her breasts.			
				* Their position allows the mother to see the position of infants mouth on the breasts, helps mother with large breasts, also avoid pressure against as abdominal incision.			
				<b>Position of mother's hands</b>			
				* Mother's hand position is also important.			
				* In the C position Mother holds the breasts with her thumb on the top and fingers against chest wall supporting underside of breasts, fingers should be behind areola.			
				*Mother should not hold the breast like scissor hold , because it suppresses the milk production.			
				<b>Latch -On Technique</b>			



			<b>Suckling Pattern</b>		
			* During healthy sucking , infants suck smoothly continuous movements with only occasional passes to rest.		
			* Each suck may be followed by a swallow can hear the audible swallowing.		
			<b>Removal From The Breast</b>		
			The mother inserts her finger into the corner of infants mouth between gums.		
			* Removes quickly from breast to avoid trauma to breast.		
			<b>Frequency of feeding</b>		
10	Describe the frequency of feeding.	3mts	* Infants usually feed 2-3 hours every time	Describing by the use of computer as power point	Listening and interacting with investigator
			* Demand feeding is advisable		How many times a day will you feed your baby.
			* In the first 24 hrs baby takes average of 5 mts per hour.		
			* Second 24 hrs increased to 14 ml per feed.		

			Average requirement of milk is about 100 ml. per Kg/24 hrs.				
			* Third day is increased to 150ml/kg/24 hrs by tenth day.				
			* During early weeks of life infant should not be allowed to sleep more than 5 hrs without feed.				
			* Baby should suckle at each breast 15 - 20 minutes. Baby should not feed by same breast for longer time to prevent engorgement.				
			<b>Burping the Baby</b>				
11	Explain the technique of burping	4mts	* The baby should be burped after each feed to prevent aspiration.	Describing by the use of computer as power point	Listening and interacting with investigator	Which position is best to burp after feed?	
			We can use three positions for burping the baby.				
			* Upright position				
			* Across mother lap				
			* Upright on mother lap				

12	<p>explain the management of problems associated with breast feeding:</p>	2mts	<p><b>Management of problems associated with breast feeding:</b>          For mothers with lactation the flow of milk can be stimulated by,          * Hot or cold bathing before starting to feed.          * Breast massage          * Adequate support from good brassieres.          * Drinking of fluids.          * Encourage the mother to express surplus milk after each fluid.          * Adequate washing and drying of the nipple will prevent them from cracking.          * The mother's general nutrition and state of health may need some attention.</p>	Describing by the use of computer as power point	Listening and interacting with investigator	explain the management of problems associated with breast feeding:
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13	Explain management of lactation problems.	5mts	<p><b>Management of Lactation Problems:</b></p> <p>* <b>Engorgement:</b> Express breast milk by hand and compression to oedematous areola using fingers, feed the baby frequently, improve positioning and attachment, use moist heat and gentle massage before feeding.</p> <p>* <b>Cracked nipple:</b> Assist with position attachment, Continue breast feeding, Treat both the mother and baby. Treat nipple abrasions and assure effective sucking, Nurse frequently, Apply moist heat before feeding, Drink more food and fluids properly, Rest as much as possible and relieve tension, Reassure her and advised to take appropriate measures to relieve inflammation.</p> <p>*<b>Not enough Milk":</b> Check for effective sucking, Increase feeding frequency at both day and night, Gentle stimulation of nipple and areola, massage breasts before and during feeding, Provide reassurance</p> <p>* <b>Inverted nipple:</b> They need more postpartum care. Use breast pump or 20 mls syringe to pull out the nipple. Use ultra- thin silicone nipple shield.</p>	Describing by the use of computer as power point	Listening and interacting with investigator	Explain management of lactation problems
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	<b>Summary</b>			
$\frac{1}{2}$ mt	<p>So far we had discussed about Lactation management. In that, We had discussed regarding meaning physiology of Lactation, advantages of breast feeding for mother and baby, Food necessary for pregnancy and lactation, antenatal preparation of mother and Feeding techniques.</p>			
	<b>Conclusion:</b>			
$\frac{1}{2}$ mt	<p>Hope that you all gained more knowledge about Lactation management. I hope that you will practices proper breast feeding in your post natal period and lead better life to your babies.</p>			

## தாய்ப்பால் உற்பத்தி மற்றும் புகட்டுதல் பற்றிய கற்பிப்புத்திட்டம்

பாடம்	: தாய்ப்பால் உற்பத்தி மற்றும் புகட்டுதல் பற்றிய கற்பித்தல்
அணி	: முதல் முறை கார்ப்பம் தரித்த தாய்மார்கள்
கற்பிப்பு முறை	: கணிணி வழி கற்பித்தல் (கம்பியூட்டர் எய்டட் இன்ஸ்ட்ரக்டர்சன்)
நேரம்	: 45 நிமிடம்
இடம்	: ஜெகதா மருத்துவமனை



வ. எண்	குறிக்கோள்	காலம்	பொருளடக்கம்	கற்பிப்பவர் செயல்பாடுகள்	கற்றறிபவர் செயல்பாடுகள்	மதிப்பீடு
1.	பாடத்தை அறிமுகப்படுத்துதல்	1 நிமிடம்	<p><b>முன்னுரை:</b></p> <p>தாய்ப்பால் பிறந்த குழந்தைக்கு சிறந்த ஊட்டச்சத்து. தாய்ப்பால் குழந்தைக்கும், தாய்க்கும் பல உடல்நல பலன்களைத் தருகிறது. இது முதல் ஒரு வருடத்திற்குத் தேவையான ஆரோக்கியம் நிறைந்த ஊட்டச்சத்தைத் தருகிறது. தாய்மார்களுக்கு தாய்ப்பால் உற்பத்தியாகும் விதம், தாய்பால் புகட்டும் முறைகள், எவ்வாறு கார்ப்பினிதாய்தன்னை முன்னும் பின்னும் தயார்படுத்தல், தாய்க்கு தேவையான உணவு பொருட்கள்.</p>	அறிமுகப் படுத்தல் கவனித்தல்	கவனித்தல்	

2.	<p>தாயின் மார்க அமைப்பினை பற்றி விவரித்தல்</p>	3 நிமிடம்	<p><b>மார்க உள்ளமைப்பு:</b></p> <p>தாயின் மார்கத்தில் முலைக்காம்பு, ஏரியோலா, சங்குட்டேனியஸ் திக, ஆல்வியோலை, குழாய்கள், மையோ எபிதிலியல் செல்கள், இரத்த மற்றும் நினைநீர் குழாய்கள், கூட்பர்ஸ் லிகமென்ஸ் மற்றும் கொழுப்பு திக உள்ளன. கொழுப்பு திக மார்கத்திற்கு வடிவத்தையும், தோற்றத்தையும் தருகிறது. கர்ப்பகாலத்தில் தாய் மார்பில் சிறிதளவு வலி மற்றும் எடை அதிகமாக இருப்பது போன்ற உணர்வு ஏற்படும். கர்ப்பகாலம் அதிகமாக அதிகமாக ஏரியோலா பெரிதாக கருத்த நிறத்தில் காணப்படும். முலைக்காம்பு மார்பின் நடுவில் உள்ளது. இதில் 5-9 துவாரங்கள் உள்ளன. இதன் வழியாக பால் வெளியேறுகிறது.</p>	<p>கம்பியூட்டர் மூலம் விளக்கம் அளித்தல்</p>	கவனித்தல்	<p>தாயின் மார்க அமைப்பினை விவரி</p>
3.	<p>தாய்ப்பால் உற்பத்தியாகும் விதம், சுரக்கும்</p>	5 நிமிடம்	<p><b>தாய்ப்பால் உற்பத்தியாகும் விதம்:</b></p> <p>கர்ப்ப காலத்தின் ஆலவியோலை எனும் சிற்றரைகள் மூலம் பால் சுரக்கப்படுகிறது. தாயின்</p>	<p>கம்பிட்டர் மூலம் விளக்கம் அளித்தல்</p>	கவனித்தல்	<p>தாய்ப்பால் எவ்வாறு சுரக்கிறது.</p>

	<p>விதம் பற்றி விவரித்தல்</p>		<p>இரத்தத்திலிருந்து சில பொருட்கள் வெளியாகி அவை சில மாற்றங்களை அடைந்து தாய்ப்பாலாக மாறுகிறது. குழந்தை பிறந்த பின்பு தாயின் மாம்பகத்தில் புரோலாக்டின் எனும் ஹார்மோன் அதிக அளவு உற்பத்தியாகிறது. கார்ப்ப காலத்தில் மாம்பத்தின் எடை அதிகரிக்கிறது. சுரமாக 1-2 lb புரோலாக்டின் என்கிற ஹார்மோன் சுரக்கப்படுவதன் மூலம் இந்த மாற்றம் ஈடுகட்டப்படுகிறது. இந்த ஹார்மோன் பால் உற்பத்தியாவதை தூண்டுகிறது. குழந்தை சப்புவதன் மூலம் ஹார்மோன் அதிக அளவு சுரக்கிறது.</p>			
			<p><b>பால் சுரக்க வைக்கும் புரோலாக்டின் தூண்டல்:</b> பிட்டியுட்டரி எனும் நாளமில்லாச் சுரப்பி அடிமூளைப்பகுதியில் உள்ளது. அச்சுரப்பியின் மூன்பகுதியில் புரோலாக்டின் உற்பத்தியாகிறது. இது பால் சுரப்பை அதிகரிக்கும். குழந்தை பால் சப்ப வாயை முலைக்காம்பில் வைத்த உடனே காம்பு மற்றும் ஏரியோராவிலுள்ள நரம்புகள் மூலம் விவரம் மூளையின் அடிபாகத்திலுள்ள ஹைப்போதலாமஸ் எனும் பகுதிக்கு</p>			

			<p>கண்ணிமைக்கும் நேரத்திற்குள் செல்லும். அங்கிருந்து பிடியட்டரிக்குச் செய்தி சென்று புரொலாக்டின் இயக்குநர் சுரந்து, இரத்தத்தில் கலந்து மார்ப்காங்களுக்குச் சென்று பால் சுரப்பைத் தூண்டுகிறது. முலைக் காம்புகளிலிருந்து விவரம் சென்று புரொலாக்டின் உற்பத்தியாகிப் பால் சுரப்பது புரொலாக்டின் தூண்டல் அல்லது பால் சுரக்கும் தூண்டல் எனப்படும்.</p>			
			<p><b>ஆக்சிடோசின் அல்லது பால் வெளியாக்கும் தூண்டல் ஆக்சிடோசின்:</b></p> <p>இந்த இயக்குநர் பிடியட்டரியில் பின்பாகத்தில் சுரக்கும் குழந்தை சப்பும் பொழுது தாயின் மார்ப்காம்பின் நரம்புகள் மூலம் விவரம் பிடியட்டரின் பின் பாகத்திற்குச் சென்று ஆக்சிடோசின் இயக்குநர் உற்பத்தியாகி, தாயின் இரத்ததின் மூலம் மார்ப்குச் செல்கிறது. இது பால் உற்பத்தியாகும் ஆல்வியோலை சிற்றலைகளைச் சுற்றியுள்ள மையோ எபித்தீலியத்</p>			

			<p>திசுக்களை முடுக்கிவிட்டு ஆல்வியோலையை சுருங்கச் செய்கின்றது. இதனால் ஆல்வியோலை எனும் சிற்றரையிலிருந்து பால் வெளியாகிச் சிறு குழாய்கள் வழியாக லேக்டிபெரஸ் சைனஸ்களை அடைந்து பின்பு காம்பு மூலம் வெளியேற்றப்படும் இவ்வாறு பால் வெளிவருவதை ஆக்சிடோசின் அல்லது பால் வெளியாக்கும் அல்லது பால் வழியும் தூண்டல் என்பர்.</p> <p>குழந்தை சப்பாமல் கூட பால் வெளியாக்கும் தூண்டலைச் செயல்படச் செய்யலாம். குழந்தையை ஆர்வத்துடன் பார்த்தாலோ, குழந்தையின் குரல் கேட்டாலோ பால் வெளியாகும். இனிமையான சூழ்நிலை நினைவுகள், நம்பிக்கை போன்றவை பால் வெளியாக்கும் தூண்டலை நன்றாக இயங்க வைக்கும்.</p> <p>தாயின் தன்னம்பிக்கையின் மற்றும் மனக்கவலை தாய்ப்பால் வெளியாவதைத் தடுக்கும் தாய்ப்பால்</p>		
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4.	<p>தாய்ப்பால் ஊட்டுதலின் பயன்களை வரிசைப்படுத்துதல்</p>	4 நிமிடம்	<p><b>தாய்ப்பால் ஊட்டுதலினால் தாய்க்கு கிடைக்கும் நன்மைகள்:</b></p> <ul style="list-style-type: none"> <li>◆ தாய்ப்பால் ஊட்டுவதனால் தாய் – சேய் பிணைப்பு அதிகரிக்கிறது.</li> <li>◆ கார்ப்ப்பை மற்றும் மார்க்ப்பு புற்று நோய் வரும் வாய்ப்பை குறைக்கிறது.</li> <li>◆ தாய்ப்பால் கொடுப்பதனால் கார்ப்ப்பை தன்னுடைய பழைய நிலையை மிக விரைவாக அடைந்து அதனோடு இரத்தப்போக்கு ஏற்படாமலும் தடுக்கின்றது.</li> <li>◆ இரும்புச் சத்தை சேர்த்து வைக்க உதவுகிறது.</li> <li>◆ தாய்ப்பால் குழந்தைக்கு ஏற்ப சாதாரண வெப்ப நிலையில் எளிதில் கிடைக்கிறது.</li> <li>◆ தாய்ப்பால் சரியான நேரத்தில் எந்தவித செலவுமின்றி கிடைக்கிறது.</li> <li>◆ தாய்ப்பால் ஊட்டுதலினால் அழுத்தம், கவலையில் இருந்து விலகிடவும் வாய்ப்பளிக்கிறது.</li> </ul>	<p>கம்பிட்டர் மூலம் விளக்கம் அளித்தல்</p>	<p>கவனித்தல் மற்றும் சந்தேகத்தைக் கேட்டல்</p>	<p>தாய்ப்பால் ஊட்டுதலின் பயன் என்ன?</p>
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		<p><b>குழந்தைக்கு கிடைக்கும் நன்மைகள்:</b></p> <ul style="list-style-type: none"> <li>★ இதில் எல்லா வகையான இயற்கை உணவுப்பொருட்கள் அடங்கியுள்ளது.</li> <li>★ தாய்ப்பால் எளிதில் செரிக்கக்கூடிய உணவு</li> <li>★ முதல் மூன்று நாட்கள் உற்பத்தியாகும் பால் அதாவது 'சீம்பால்'. இது குழந்தைக்கு தொற்று நோய் வராமலும் தடுக்கின்றது.</li> <li>★ குழந்தைக்கு தாய்ப்பால் தொடர்ந்து கொடுப்பதனால் சுவாசக் குழாய் மற்றும் காது நோய்கள், காய்ச்சல், வயிற்றுப்போக்கு சர்க்கரைநோய், உடல் பருமனாதல் ஒவ்வாமை நோய்கள் ஆகியன வராமல் பாதுகாக்கின்றது.</li> <li>★ தாய்ப்பால் குழந்தைக்கு ஏற்ப சரியான வெப்ப நிலையில் மிக எளிதில் கிடைக்கிறது.</li> <li>★ தாய்ப்பால் கொடுப்பதினால் குழந்தைக்கு மூளை வளர்ச்சி அதிகரிக்கின்றது.</li> </ul> <p>தாய்ப்பாலின் அடங்கியுள்ள பொருட்கள்</p>		
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		<p><b>❁ கொலஸ்ட்ரம்:</b></p> <p>இது குழந்தைக்கு முதல் தடுப்பூசியாக அமைகிறது. இதில் அதிகளவு புரதம், லாக்டோஸ் எனும் மாவுசத்து சிறிதளவு கொழுப்பு மற்றும் பீட்டா (β) கரோட்டின் (Vi+A) உள்ளது. இதனால் இது மஞ்சல் நிறமாக காணப்படுகிறது.</p> <p>இது குழந்தை பிறந்த இரண்டு-4 நாட்கள் வரை ஒரு நாளைக்கு 40-50ml வரை சுரக்கும். ஒரு நாளைக்கு 7-10 நாட்களுக்கு பிறகு 600-900ml ஒரு நாளைக்கு தாய்ப்பால் சுரக்கும்.</p> <p><b>தண்ணீர்:</b> இதில் 87% உள்ளது.</p> <p><b>கொழுப்பு:</b> 50% கலோரி கொழுப்பு சத்து கிடைக்கிறது.</p> <p><b>புரதம்:</b> 0.9% குறைந்த அளவாக உள்ளது.</p> <p><b>மாவுச்சத்து:</b> லாக்டோஸ், வைட்டமின்கள் அடங்கியுள்ளது. வளர்ச்சி காரணிகளும், ஹார்மோன்கள் மற்றும் நோய் எதிர்ப்புசக்தி தரும் பொருட்களும் உள்ளன.</p>		
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5.	<p>கர்ப்ப காலத்திலும் தாய்ப்பால் ஊட்டும் காலத்திலும் உண்ண வேண்டிய உணவு வகைகளை சுட்டிக்காட்டுதல்</p>	5 நிமிடம்	<p><b>பாலூட்டும் தாய்மார்கள் எடுத்துக்கொள்ள வேண்டிய உணவு வகைகள்:</b></p> <p>❖ தாய்மார்கள் அதிக அளவு நீர் ஆகாரங்களை உட்கொள்ள வேண்டும். அப்போதுதான் பால் சுரக்கும் அளவு அதிகமாகும். பாலூட்டும் தாய்மார்கள் குறைந்தது ஒரு நாளைக்கு 7-8 டம்ளர் நீர் அருந்த வேண்டும். அதோபோல் அதிக அளவு சத்து நிறைந்த உணவையும் உண்ண வேண்டும். சுரமாக ஒரு நாளைக்கு 650 கலோரி அளவு உணவு உட்கொள்ள வேண்டும்.</p> <p>❖ தாய்மார்கள் அதிக அளவு சத்துள்ள உணவை உட்கொள்ள வேண்டும், அதாவது உதாரணத்திற்கு கேழ்வரகு, வெல்லம், பால் மற்றும் பால் நிறைந்த உணவுப்பொருட்களையும்</p>	<p>கம்பிட்டர்</p> <p>மூலம்</p> <p>விளக்கம்</p> <p>அளித்தல்</p>	<p>கவனித்தல்</p> <p>மற்றும்</p> <p>கற்பிப்பவரிடம்</p> <p>கலந்து</p> <p>உரையாடல்</p>	<p>தாய்ப்பால்</p> <p>ஊட்டும்</p> <p>போது என்ன</p> <p>வகை</p> <p>உணவுகள்</p> <p>உட்கொள்ள</p> <p>வேண்டும்</p>
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		<p>உண்ண வேண்டும். அப்போதுதான் பால் சரக்கும் அளவு அதிகரிக்கும்.</p> <p>❖ தாய்மார்கள் ஒரு நாளைக்கு 2 டம்ளர் காபீ அருந்தலாம். 7-8 டம்ளர்க்கு மேல் காபீ அருந்தக்கூடாது. ஏனெனில் தாய்மார்க்கு அதிக அளவு இரும்புச்சத்து தேவையானது. அதனால் அதிக அளவு தேனீர் குடிக்கும்போது இரத்த சோகை நோய் ஏற்பட வாய்ப்பு உள்ளது. இதனால் எளிதில் கருச்சிதைவு, பிறக்கும்போது குழந்தை இறந்து விடுதல், குறைமாதத்தில் பிறத்தல் மற்றும் பல நோய்கள் ஏற்பட வாய்ப்பு உள்ளது.</p> <p>❖ பேறு காலத்தின் போது தாய்மார்கள் அதிக அளவு சத்து நிறைந்த உணவு பொருட்களை உட்கொள்ள வேண்டும். முதலில் இரும்புச்சத்து, வைட்டமின் மற்றும் வைட்டமின் நிறைந்த</p>		



❖	<p>மருத்துவர் அறிவுரையின்றி மருந்துப் பொருட்களை உபயோகித்தல் கூடாது.</p>		
❖	<p>மருத்துவர் அறிவுரைப்படி கிடைக்கப்பெற்ற வைட்டமின், இரும்பு மற்றும் கால்சியம் சத்து மாத்திரைகளை உட்கொள்ள வேண்டும்.</p>		
❖	<p>தாய்மார்கள் கண்டிப்பாக குறைந்தது ஒரு நாளைக்கு 500 மி.லி பால் அருந்த வேண்டும்.</p>		
❖	<p>பேறுகாலத்தில் போது பச்சைக்காய்கறிகள் எடுத்துக்கொள்ளவும். அப்போதுதான் இரும்புச்சத்து மற்றும் வைட்டமின் சத்து அதிக அளவு உற்பத்தியாகிறது.</p>		
❖	<p>வைட்டமின் நிறைந்த பழ வகைகள் உட்கொள்ளவும் அதாவது எழுமிச்சை, தக்காளி, ஸ்ட்ராபெரி, தானியங்கள், ஆரஞ்சு போன்ற உணவு வகைகளை உண்ண வேண்டும்</p>		

			<p>❖ தாய்மார்கள் மாமிசம் நிறைந்த உணவுப் பொருட்களையும் உட்கொள்ள வேண்டும். அதாவது ஆட்டுக்கறி, மீன் இதனால் தாய்பாலின் அளவு அதிகமாக சுரக்கின்றது.</p> <p>❖ தாய்மார்கள் ரசம் போன்ற பாணங்களை அருந்தவும். இதனால் தாய்க்கு பசித்தன்மை</p> <p><b>பிற அறிவுரைகள்</b></p> <p>❁ தாய்க்கும் தன்னம்பிக்கை ஏற்படக்கூடிய அளவிற்கு மனதை தயார் செய்து கொள்ள வேண்டும்</p> <p>❁ வேலைக்கு செல்லும் தாயிராயிருப்பின் குழந்தையையும் வேலைபார்க்கும் இடத்திற்கு எடுத்து சென்று பால் கொடுக்க வேண்டும். அல்லது ஷிப் டியூட்டி பார்த்தல் நல்லது அல்லது குழந்தைகள் காப்பகத்தில் விட்டு, இடைவேலையின் போது வந்து தாய்பால் கொடுக்கலாம்.</p>		
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			<p>❁ அதிகளவு வேலைப்பளு மற்றும் கவலை, கடின வேலை தவிர்த்தல் வேண்டும்.</p> <p>❁ உடலைமைப்பு பற்றிய ஏதேனும் எழும் சந்தேகங்களை உடனடியாக விடைகேட்டறிந்து கொள்ள வேண்டும்.</p> <p>❁ மிருதுவாக சரியான அளவுள்ள பிரா உள்ளாடையை மார்பிற்கு சப்போர்ட்டாக அணிய வேண்டும்.</p>		
6.	<p>குழந்தை பிறக்கும் முன் தாயை பற்றி கலைந்துரையாடல்</p>	5 நிமிடம்	<p><b>குழந்தை பிறக்கும் முன் தாயை தயார்படுத்துதல்</b></p> <p>⦿ முதலில் தாய்ப்பால் ஊட்டுவதன் நன்மைகளை தெளிவாக தாய்மார்களுக்கு எடுத்துரைக்கவும்.</p> <p>⦿ தாய்மார்கள் நல்ல ஓய்வு எடுத்துக்கொள்ள வேண்டும் அதோடு மட்டுமில்லாமல் அவர்களின் நெருங்கிய உறவினரிடம் அவர்களின் வேலைப்பளுவை குறைக்குமாறு சொல்ல வேண்டும்.</p>		

◎	தாய்மார்கள் மாப்பகத்தை கர்பகாலத்தின் போதே பரிசோதனை செய்து, பிரச்சனைகள் அதாவது மாப்பக காம்புகளில் ஏதாவது கீறல்கள் மற்றும் காம்பு உள்நோக்கி உள்ளதா என்று பரிசோதிக்க வேண்டும்.				
◎	தாய்மார்கள் மாப்பகத்தில் 'சோப்பு போன்றவற்றை உபயோகிக்க கூடாது. இதனால் பல நோய்கள் வராமல் தடுக்கிறது.				
◎	மிக அதிக தீவிர உடற்பயிற்சி மற்றும் கடின வேலைகளை தவிர்க்க வேண்டும்.				
◎	அதாவது வாசனை உள்ள பொருட்களை உபயோகித்தால் மாப்பகக் காம்புகளில் ஏதேனும் எரிச்சல் ஏற்பட வாய்ப்புண்டு.				
◎	குழந்தைக்கு மிகக் குறைந்த இடைவெளிகளில் சரியான முறையிலும், நன்கு ஆறுதலாக வைத்தாலுமே பால் உற்பத்தி அளவு அதிகரிக்கும்.				

		<p>பால் சுரக்கும் அளவு வெறும் உணவினால்தான் மட்டுமல்ல, தாய்மார்கள் நல்ல ஓய்வும் எடுப்பதினாலும் மற்றும் எந்த வித கவலையும் இல்லாதிருத்தலாலும் அதிகரிக்கிறது.</p> <p>பால் சுரக்கும் விதம் தன்னம்பிக்கையும் பொறுத்துதான் உள்ளது.</p> <p>தொடர்ந்து பால் உண்டுவதால் தாயின் தேவையற்ற உடல் பருமன் குறைந்து அழகுடன் இருப்பார்கள்.</p> <p>குழந்தைக்கு தாய்ப்பால் கொடுக்கும் முன்பும், பின்பும் மாப்பக பகுதியை சுத்தமான நீரால் துடைக்கவும் (அ) கழுவ வேண்டும். இது பலவித தொற்று நோய்கள் வராமல் தடுக்கிறது.</p> <p><b>பாலூட்டுதலுக்கு தயார்படுத்துதல்</b></p> <p>பிரசவத்திற்கு பின் 30 நிமிடத்திற்குள் ஒரு தாய் தன் குழந்தைக்கு பாலூட்ட வேண்டும்.</p> <p>அறுவை சிகிச்சை பிரசவம் எனில் 2-4 மணி</p>	



			<p>நேரத்திற்குள் பால்புகட்ட வேண்டும்.</p> <ul style="list-style-type: none"> <li>◆ முதல் முறை தாய் பாலூட்டும்போது குழந்தையை தன் மார்பக காம்புடன் 5-10 முறை சப்ப விட வேண்டும்.</li> <li>◆ அடிக்கடி குழந்தை மார்பக காம்பை சப்புவதால் பால் உற்பத்தி அதிகரிக்கிறது மற்றும் பால் கட்டுவது குறைக்கப்படுகிறது.</li> <li>◆ குழந்தைக்கு பாலூட்டுவதற்கு முன்பு தாய் தன் மார்பு பகுதியை நன்கு சுத்தமான நீரில் சுழிவிட்டு பின்பு வேண்டும்.</li> <li>◆ பால் கட்டியிருந்தால் அந்த பாலை குழந்தைக்கு கொடுக்க கூடாது. ஏனெனில் வயிறு சம்மந்தமான பிரச்சனைகள் குழந்தைக்கு ஏற்படும்.</li> </ul>		
7.	தாய்ப்பாலூட்டும் முறைகளை விளக்குதல்	2 நிமிடம்	<p><b>தாய்ப்பாலூட்டும் முறைகள்</b></p> <ul style="list-style-type: none"> <li>❖ ஒவ்வொரு முறையும் தாய் பாலூட்டும் முன்பு ஏதாவது நீர் ஆகாரங்கள் எடுத்து கொள்ள</li> </ul>	கம்பிட்டர் மூலம் விளக்கம்	குழந்தைக்கு எப்படி பாலூட்டுவீர்

			<p>அளித்தல்</p>	<p>கலந்து உரையாடல்</p>	<p>கள்</p>
			<p>வேண்டும்.</p> <ul style="list-style-type: none"> <li>❖ பாலாட்டுவதற்கு முன்பு தனது கைகளை தாய் நன்கு கழுவ வேண்டும்.</li> <li>❖ தனது மார்பு பகுதியையும் தாய் நன்கு கழுவ வேண்டும். ஆனால் சோப்பு உபயோகிக்காமல் சுத்தமான நீரை மட்டுமே பயன்படுத்த வேண்டும்.</li> <li>❖ தாய் பாலாட்டுவதற்கு தனிமையை உபயோகிக்க வேண்டும். இதனால் தேவையில்லாத பயம், கவலை எல்லாம் தவிர்க்கப்படுகிறது.</li> <li>❖ தாய் பாலாட்டும்போது தன் குழந்தையை பொருத்தமான நிலையில் வசதியாக வைக்க வேண்டும்.</li> </ul>		

8.	<p>பாலுட்டும்போது தாய் குழந்தையின் பொருத்தமான நிலைகளை விவரித்தல்</p>	3 நிமிடம்	<p><b>பாலுட்டும்போது தாய்-குழந்தையின் பொருத்தமான நிலைகள்:</b></p> <ol style="list-style-type: none"> <li>1. தொட்டில் (அ) உட்கார்ந்து அமர்ந்த நிலை</li> <li>2. ஒருக்களித்துப்படுத்துப் பாலுட்டுதல்</li> <li>3. கால்பந்து தாங்குவது போன்ற நிலை.எ</li> </ol> <p><b>தொட்டில் நிலை:</b></p> <p>தாய் வசதியாக அமர்ந்து கையால் தொட்டில் போல் குழந்தையின் உடலைத் தாங்கிப் பாலுட்டலாம். முன் கையால் குழந்தையின் தலையைத் தாங்கலாம். மற்றொரு கை அல்லது தலையணையை உபயோகித்து குழந்தையை வசதியாக சிரமமின்றித் தாங்க உதவலாம். ஊட்கார்ந்த நிலையில் பால் கொடுத்தல் சிறந்த முறை.</p> <p><b>ஒருக்களித்துப்படுத்துப் பாலுட்டுதல்:</b></p> <p>இது இரவு நேரங்களில் ஊட்டுவதற்கு பயன்</p>	<p>கம்பிட்டர்</p> <p>மூலம்</p> <p>விளக்கம்</p> <p>அளித்தல்</p>	<p>கவனித்தல்</p> <p>மற்றும்</p> <p>கற்பிப்பவரிடம்</p> <p>கலந்து</p> <p>உரையாடல்</p>	<p>பாலுட்டுவதற்கு</p> <p>பொறுத்தமான நிலை எது</p>
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			<p>உள்ளது இது பாலூட்ட வசதியான நிலை. தாய் ஒரு பக்கமாய்ப்படுத்து குழந்தையை தன் பக்கமாக அணைத்துப் பாலூட்டலாம். குழந்தையின் தலை மற்றும் குழந்தை கை அல்லது தலையணையைக் கொண்டு தாங்கலாம்.</p> <p><b>கால்பந்தை தாங்குவது போன்ற பாலூட்டும் நிலை:</b></p> <p>உட்கார்ந்து கொண்டோ (அ) பின் பக்கம் சாய்ந்து உட்கார்ந்தோ குழந்தையின் உடலையும் தலையையும் கையினால் தாங்கிப் பாலூட்டலாம். குழந்தையின் கால்கள் தாயின் முதுகு புறமிருக்கும். அதன நெஞ்சு வயிறு எல்லாம் வைத்து நன்றாகத் தாங்கிக் கொள்ளலாம்.</p> <p>குழந்தையின் வாயினுள்ளே முலைக்காம்பும், எரியோலாவும் சென்று பால் அருந்துவது தான் சரியான நிலை பிணைப்பு. குழந்தை சரியான நிலையில் பால் சப்பினால் அதிகபால் உற்பத்தியாகி, வெளியாகி,</p>		
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			<p>தேவையைப் பூர்த்தி செய்யும்.</p> <p>✳ குழந்தையின் மேலுதடு, கன்னம் அல்லது வாயின் பக்கத்தில் தாயின் முலைக்காம்புகளால் தடவ வேண்டும்.</p> <p>✳ குழந்தை வாயைத் திறந்தவுடன், குழந்தை மார்போடு அணைத்து காம்பை உள்ளே செலுத்த வேண்டும்.</p> <p>✳ தாய் மற்றொரு கையினால் மார்பத்தைத் தாங்கிப் பாலூட்டலாம். கட்டை விரலை மேல் பக்கமும், மற்ற நான்கு விரல்களை கீழ்ப்பக்கமும் வைத்துக் தாங்க வேண்டும். C" வடிவத்தில் அமைக்க வேண்டும்.</p>	

9.	<p>குழந்தைக்கு தாய்ப்பால் உட்கொடுப்பதும் திறனை பற்றி கற்றுக் கொடுத்தல்</p>	3 நிமிடம்	<p><b>குழந்தைக்குத் தாய் பாலூட்டுதல் திறன் வளர்க்கும் வழிகள்:</b></p> <p>இந்தத் திறன் பிறக்கும் போது இருப்பதில்லை. பிறந்தபின் சரியான பழக்கத்தால் பெற வேண்டும்.</p> <p>குழந்தையின் உதட்டைக் காம்புத் தொட்டவுடன் மாப்பு தேடும் நிகழ்வு நடக்கும். குழந்தை வாய்த்திறந்தவுடன், குழந்தையின் வாயினுள் செலுத்த வேண்டும்.</p> <p>ஏரியோலாவையும், குழந்தையின் வாயினுள் செலுத்த வேண்டும்.</p> <p>குழந்தையின் மேலண்ணத்தைத் தொடவும் சப்புதல் அதாவது பால் சப்புதல் நிகழ்வு நடக்கும்.</p> <p>வாய்த் திறந்த நிலையில் மார்புக்காம்பு உள்செல்கிறது. நாக்கு வெளியிலிருந்து மார்பை</p>	<p>கம்பிடர்</p> <p>மூலம்</p> <p>விளக்கம்</p> <p>அளித்தல்</p>	<p>கவனித்தல்</p> <p>மற்றும்</p> <p>கற்பிப்பவரிடம்</p> <p>கலந்துரையாடல்</p>	<p>பாலூட்டும் திறன் பற்றி விவரிக்கவும்</p>
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	<p>உள்ளியுக்கத் தயாராக உள்ளது. தாய் குழந்தையை தன்னோடு அரவணைத்து மார்க்காம்பு மற்றும் ஏரியோலா முழுவதையும் உள் செலுத்தும் திறமையை வளர்க்க வேண்டும். குழந்தை வாய்த் திறந்த நிலையில் சப்புகிறது. கீழ்த்தாடை மார்போடு ஒட்டியுள்ளது.</p>	
	<p>சரியான நிலையில் மார்பு குழந்தையின் வாயில் பிணைக்கப்பட்டால் தாய்ப்பால் நன்கு குழந்தைக்கு கிடைக்கும்.</p>	
	<p>குழந்தைக்குப் பாலூட்டும்போது தாய் தன் குழந்தையை நன்கு பார்த்து, குழந்தையோடு பேசிக்கொண்டு அரவணைப்போடு கொடுக்க வேண்டும்.</p>	
	<p>குழந்தைப் பால் குடிக்கும்போது இடைவெளி விட்டு சப்பும் குழந்தை விழுங்கும் சத்தம் கேட்கும் அமைதியாக அழாமலிருக்கும். வேண்டிய அளவு நேரம் குழந்தையை பால் சப்பவிட வேண்டும்.</p>	

			<p>பால் குடித்தவுடன் குழந்தை மார்பை விட்டுவிடும், காம்பை வெளியே எடுக்க கீழ்த்தாடையை சிறிது அழுத்தித் தாயின் சுண்டு விரலை குழந்தை வாயினுள் செலுத்தி மெதுவாக அகற்ற வேண்டும்.</p>			
<p>10.</p>	<p>குழந்தைகுக அடிக்கடி பாலூட்டுதல் பற்றி விவரித்தல்</p>	<p>2 நிமிடம்</p>	<p><b>அடிக்கடி பாலூட்டுதல்:</b></p> <ul style="list-style-type: none"> <li>❖ குழந்தை பசித்து அழும்போதெல்லாம் பாலூட்ட வேண்டும். இதனால் குழந்தை தன் தேவைக்கேற்ப பால் குடிக்கிறது.</li> <li>❖ 1 முதல் 3 மணி நேர இடைவெளியில் பால் குடிக்கும். சில சமயங்களில் அடிக்கடி பால் குடிக்கும்.</li> <li>❖ சரியாக பால் ஊறியவுடன் நாளொன்றுக்கு 8 – 12 முறை பால் குடிக்கும்.</li> </ul>	<p>கம்பிட்டர் மூலம் விளக்கம் அளித்தல்</p>	<p>கவனித்தல் மற்றும் கற்பிப்பவரிடம் கலந்துரையாடல்</p>	<p>குழந்தைக்கு எப்போது பாலூட்டுவீர் கள்</p>



11.	குழந்தைக்கு அடிக்கடி பாலூட்டுதல் பற்றி விவரித்தல்	2 நிமிடம்	<p>❖ முதல் 7 நாட்களில் 3 மணி நேரத்திற்கு மேல் விட்டு சப்பும் குழந்தை விழுங்கும் சத்தம் கேட்கும் அமைதியாக அழாமலிருக்கும். வேண்டிய அளவு நேரம் குழந்தையை பால் சப்பிவிட வேண்டும்.</p> <p>❖ பால் குடித்தவுடன் குழந்தை மார்பை விட்டுவிடும், காம்பை வெளியே எடுக்க கீழ்த்தாடையை சிறிது அழுத்தித் தாயின் சுண்டு விரலை குழந்தை வாயினுள் செலுத்தி மெதுவாக அகற்ற வேண்டும்.</p> <p>⊙ <b>அடிக்கடி பாலூட்டுதல்:</b> குழந்தை பசித்து அழும் போதெல்லாம் பாலூட்ட வேண்டும். இதனால் குழந்தை தன் தேவைக்கேற்ப பால் குடிக்கிறது.</p> <p>⊙ 1 முதல் 3 மணி நேர இடைவெளியில் பால் குடிக்கும். சில சமயங்களில் அடிக்கடி பால் குடிக்கும்.</p>	<p>கம்பிட்டர்</p> <p>மூலம்</p> <p>விளக்கம்</p> <p>அளித்தல்</p>	<p>கவனித்தல்</p> <p>மற்றம்</p> <p>கற்பிப்பவரிடம்</p> <p>கலந்துரையாடல்</p>	<p>குழந்தைக்கு</p> <p>எப்போது</p> <p>பாலூட்டுவீர்</p> <p>கள்</p>
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			<p>☉ சரியாக பால் ஊறியவுடன் நாளொன்றுக்கு 8-12 முறை பால் குடிக்கும்.</p> <p>☉ முதல் 7 நாட்களில் 3 மணி நேரத்திற்கு மேல் பால் கொடுக்காமல் இருக்கக்கூடாது.</p> <p>☉ குழந்தைக்கு இரு மார்பகத்திலும் 15-20 நிமிடம் பாலூட்ட வேண்டும். ஒரே மார்பகத்தில் அதிக நேரம் கொடுக்கக் கூடாது. இதனால் பால் கட்டும் பிரச்சனைகளை தடுக்க முடியும்.</p>		
12.	<p>குழந்தைக்கு பாலூட்டிய பின்பு தட்டிக் கொடுக்கும் நிலைகளை விளக்குதல்</p>	2 நிமிடம்	<p><b>குழந்தைக்கு பாலூட்டிய பின்பு தட்டிக் கொடுக்கும் நிலைகள்:</b></p> <p>☺ ஒவ்வொரு முறையும் பாலூட்டியப் பின் குழந்தையை முதுகு புறமாக தட்டிக் கொடுக்க வேண்டும்.</p> <p>☺ குழந்தை ஏப்பம் விட்ட பின்னால் படுக்க வைக்க வேண்டும். இதன் மூலம் புறை ஏறாமல் தடுக்க முடியும்.</p>	<p>கவனித்தல் மற்றும் கற்பிப்பவரிடம் கலந்துரையாடல்</p>	<p>பாலூட்டிய பின்பு குழந்தையை எப்படி தட்டிக்கொடுப்பீர்கள்</p>

			<p>☺ தாயின் தோள் பட்டையில் தாங்கிகொடுத்த நிலை</p> <p>☺ குழந்தையை மடியில் தாங்கிப் பிடித்த நிலையில் தட்டிக்கொடுத்தல்</p> <p>☺ குழந்தையை தலையணையில் படுக்க வைத்து தலையை ஒரு பக்கமாக திருப்பிய நிலையில் முதுகில் தட்டிக் கொடுத்தல். குழந்தையை தட்டிக் கொடுத்தவுடன் வலது புறமாக ஒருக்களித்துப் படுக்க வைக்க வேண்டும்.</p> <p>☺ பாலூட்டிய பின்பு குழந்தை நன்றாக உறங்கும்.</p> <p>☺ தாய் நன்கு ஓய்வு எடுக்க வேண்டும்.</p>		
<p>ள13.</p>	<p>தாய்ப்பால் கொடுக்கும் பொழுது சாதாரணமாக ஏற்படும்</p>		<p><b>மார்பக காய்ப்பு உள்வாங்கிய நிலை:</b></p> <p>☯ இவ்வகை தாய்மார்களுக்கு போதுமான உதவி குழந்தை பிறப்பிற்கு பின் தேவைப்படுகிறது.</p> <p>☯ அதனால் குழந்தை பிறந்த உடனேயே தாய்ப்பால் புகட்ட பழக வேண்டும்.</p> <p>☯ மார்பக பம்பு வேண்டுமானால்</p>		

	<p>பிரச்சனைகள்</p>	<p>உபயோகப்படுத்தலாம்.</p> <ul style="list-style-type: none"> <li>☯ இல்லையெனில் 20ml ஊசியை எடுத்து முனையை வெட்டிவிட்டு பிஸ்டனை மாற்றி சொருகி மார்காம்பின் மேல் வைத்து இழுத்தால் உள்நோக்கிய மார்பு காம்பு வெளியில் வரும்.</li> <li>☯ பாட்டில், புட்டி பால் மற்றும் ரப்பர்களை குழந்தைக்கு பழக்க கூடாது.</li> <li>☯ அதுவும் இல்லையெனில் அல்டா-தின்-சிலிக்கான் ரப்பர் காம்புகளை உபயோகப்படுத்தலாம்.</li> </ul> <p><b>காயம் ஏற்பட்டுள்ள முலைக்காம்பு:</b></p> <ul style="list-style-type: none"> <li>◆ இது ஒழுங்கு முறையில் பால் புகட்டினாலே இவ்வாறு ஏற்படும் காயங்களை தவிர்க்கலாம்.</li> <li>◆ ஒவ்வொரு முறை பால் கொடுத்த பின்னரும் முலைக்காம்பு மற்றும் ஏரிபோலாலை கண்காணிக்க வேண்டும்.</li> <li>◆ ஒவ்வொரு முறை சரியான முறையில் குழந்தையை மார்பத்தில் பொருத்தி பால் புகட்டுகின்றோமா என</li> </ul>			
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			<p>பார்த்து பொறுமையாக கொடுக்க வேண்டும்.</p> <ul style="list-style-type: none"><li>◆ குழந்தைக்கு வாயிலும், நாக்கிலும் ஏதேனும் மாறுபாடுகள் உள்ளதா என சோதித்தறிய வேண்டும்.</li><li>◆ தாயை அடிக்கடி பாலூட்டுமாறு அறிவுறுத்த வேண்டும்.</li><li>◆ குழந்தையை ஒவ்வொரு முறை பாலூட்டும் போதும் குழந்தையை பாலூட்டும் நிலைகளை மாற்றி பாலூட்டலாம்.</li><li>◆ ஏதேனும் மருத்துவர் அறிவுரைப்படி லோசன் மற்றும் கிரீம்கள் மற்றும் தாய்பாலையே காம்பை சுற்றி தடவி உலர வைத்தல் நல்ல சுகம் தரும்.</li></ul> <p><b>மார்பகத்தில் பால் கட்டுதல்:</b></p> <p>இது சாதாரணமாக பிரசவமாகி 3-5 நாட்களுக்கு பின்னர் இந்த பிரச்சனை ஏற்படும். ஏனெனில் அப்பொழுதுதான் தாய்பால் அதிகமாக சுரக்க ஆரம்பிக்கும். குழந்தையை அடிக்கடி மார்பகத்தில் சப்ப</p>	
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				<p>◆ இந்த சமயத்தில் முட்டை கோஸ், மல்லிகை பூ வைத்தல் நல்லது.</p> <p>◆ உள்ளடையை சற்று இருக்கமாக அணிதல் நல்லது.</p>	
			<p><b>முடிவுரை:</b></p> <p>இது வரை நான் சொல்லிக் கொடுத்த அனைத்தும் உங்களுக்கு புரிந்திருக்கும் என நம்புகிறேன். இதனை நீங்கள் நன்கு மனதில் வைத்து குழந்தைக்கு பாலூட்டும்போது செயல்படுத்த வேண்டும். இதன் மூலம் உங்கள் குழந்தையின் எதிர்காலத்தை நோயின்றி வாழ்வதற்கு வழிவகுக்க முடியும்.</p>		

## LETTER SEEKING PERMISSION TO CONDUCT PILOT STUDY

From

A. Sheela Margaret,  
II Year M.Sc (N),  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikovil,  
Trichy – 5.

To

The Administrator,  
Jegadha Maternity Hospital,  
Trichirappalli.

Through

The Principal,  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikovil,  
Trichy – 5.

Respected Sir,

**Sub:** *Letter requesting permission to conduct pilot study.*

I am A. Sheela Margaret M.Sc. Nursing student of Dr. G. Sakunthala College of Nursing, Thiruvanaikovil, Trichy-5. As part of my course, I am doing study on the topic mentioned below.

‘A pre experimental study to determine the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichirappalli’.

I would like to do my pilot study of my research at your hospital, hence I request you to kindly consider my request and grant me permission to do my pilot study for 5 primimothers. Kindly do the needful. I assure you that I will abide by the institutions policies.

Thanking you,

Your's sincerely,  
A. Sheela Margaret  
II Year M.Sc (N) Student



## **LETTER SEEKING PERMISSION TO CONDUCT STUDY**

From

A. Sheela Margaret,  
II Year M.Sc (N),  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikovil,  
Trichy – 5.

To

The Administrator,  
Jegadha Maternity Hospital,  
Trichirappalli.

Through

The Principal,  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikovil,  
Trichy – 5.

Respected Sir,

**Sub:** *Letter requesting permission to conduct study.*

I am A. Sheela Margaret, M.Sc. Nursing student of Dr. G. Sakunthala College of Nursing, Thiruvanaikovil, Trichy-5. As part of my course, I am doing study on the topic mentioned below.

‘A pre experimental study to determine the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichirappalli’.

I would like to do my pilot study of my research at your hospital, hence I request you to kindly consider my request and grant me permission to do my study for 5 primimothers. Kindly do the needful. I assure you that I will abide by the institutions policies.

Thanking you,

Your’s sincerely,  
**A. Sheela Margaret**  
II Year M.Sc (N) Student

## **APPENDIX – F**

### **LETTER SEEKING PERMISSION TO CONDUCT THE RESEARCH STUDY**

From

A. Sheela Margaret,  
II Year M.Sc (N),  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikovil,  
Trichy – 5.

To

The Principal,  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikovil,  
Trichy – 5.

Respected Madam,

**Sub:** *Letter seeking permission to conduct the study.*

I am final year M.Sc., Nursing student of Dr. G. Sakunthala College of Nursing. I would like to conduct a study as a part of partial fulfillment for the degree of masters in Nursing. The statement of the problem is ‘A pre experimental study to determine the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichirappalli’, during the year 2010-2011”. Kindly grant me permission to conduct the study.

Thanking you in anticipation.

Your’s faithfully,  
A. Sheela Margaret

**LETTER GRANTING PERMISSION TO CONDUCT  
RESEARCH STUDY**

From

The Administrator,  
Jegadha Maternity Hospital,  
Trichirappalli.

To

The Principal,  
Dr. G. Sakunthala College of Nursing,  
Thiruvanaikoil,  
Trichy-5.

Respected Madam,

**Sub:** *Permission to conduct study in Spastic Society School.*

A. Sheela Margaret, M.Sc., Nursing student of Dr. G. Sakunthala College of Nursing, Trichy-5, is granted permission to do her project 'A pre experimental study to determine the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichirappalli',

Thanking you.

**Date :**

Yours Sincerely,

**Place:**

**The Administrator**  
Jegadha Maternity Hospital  
Trichirappalli.

## REQUISITION LETTER TO MEDICAL GUIDE

From

Mrs. A. Sheela Margaret,  
II yr. M.Sc.(N),  
Dr. G. Sakunthala College of Nursing,  
Trichy.

To

Dr. Kanthamani, M.D., D.G.O., F.I.C.M.C.H.,  
Professor in Obstetrics and Gynecology,  
G.V.N. Hospital,  
Trichy.

Respected Sir,

**Sub:** *Requesting permission for the guidance to conduct the study, regarding .....*

I am studying in II yr. M.Sc. (N) at Dr. G. Sakunthala College of Nursing, Trichy. I would like to conduct a study as a partial fulfillment for the degree of M.Sc.(N)., the statement of the problem is : ‘A pre experimental study to determine the effectiveness of computer aided instruction on knowledge and expressed practice of lactation management among primimothers at selected maternity hospitals, Trichirappalli’.

I humbly request you to guide me and kindly give suggestions for conducting the study, I will be thankful sir.

Thanking you in anticipation

**Place:**

Yours sincerely,

**Date:**

**(Mrs. A. Sheela Margaret)**